

November, 1957

Volume 56

Number 11



# *The Journal* **Michigan**

STATE MEDICAL SOCIETY

**OFFICIAL REPORT**  
Opinion Study of Prepaid Medical  
Care Coverage in Michigan



pointing to progress

# FOR PERSISTENT INFECTIONS

# CHLOROMYCETIN®

## COMBATS MOST CLINICALLY IMPORTANT PATHOGENS



Acquired resistance seldom imposes restrictions on antimicrobial therapy when CHLOROMYCETIN (chloramphenicol, Parke-Davis) is selected to combat gram-negative pathogens involving enteric and adjacent structures of the urinary tract. The acknowledged effectiveness with which CHLOROMYCETIN suppresses highly invasive staphylococci<sup>1-9</sup> extends to persistently pathogenic coliforms.<sup>6,10-15</sup> Experience with mixed groups of *Proteus* species, for example, "...shows chloramphenicol to be the drug of choice against these bacilli..."<sup>15</sup>

CHLOROMYCETIN is a potent therapeutic agent and, because certain blood dyscrasias have been associated with its administration, it should not be used indiscriminately or for minor infections. Furthermore, as with certain other drugs, adequate blood studies should be made when the patient requires prolonged or intermittent therapy.

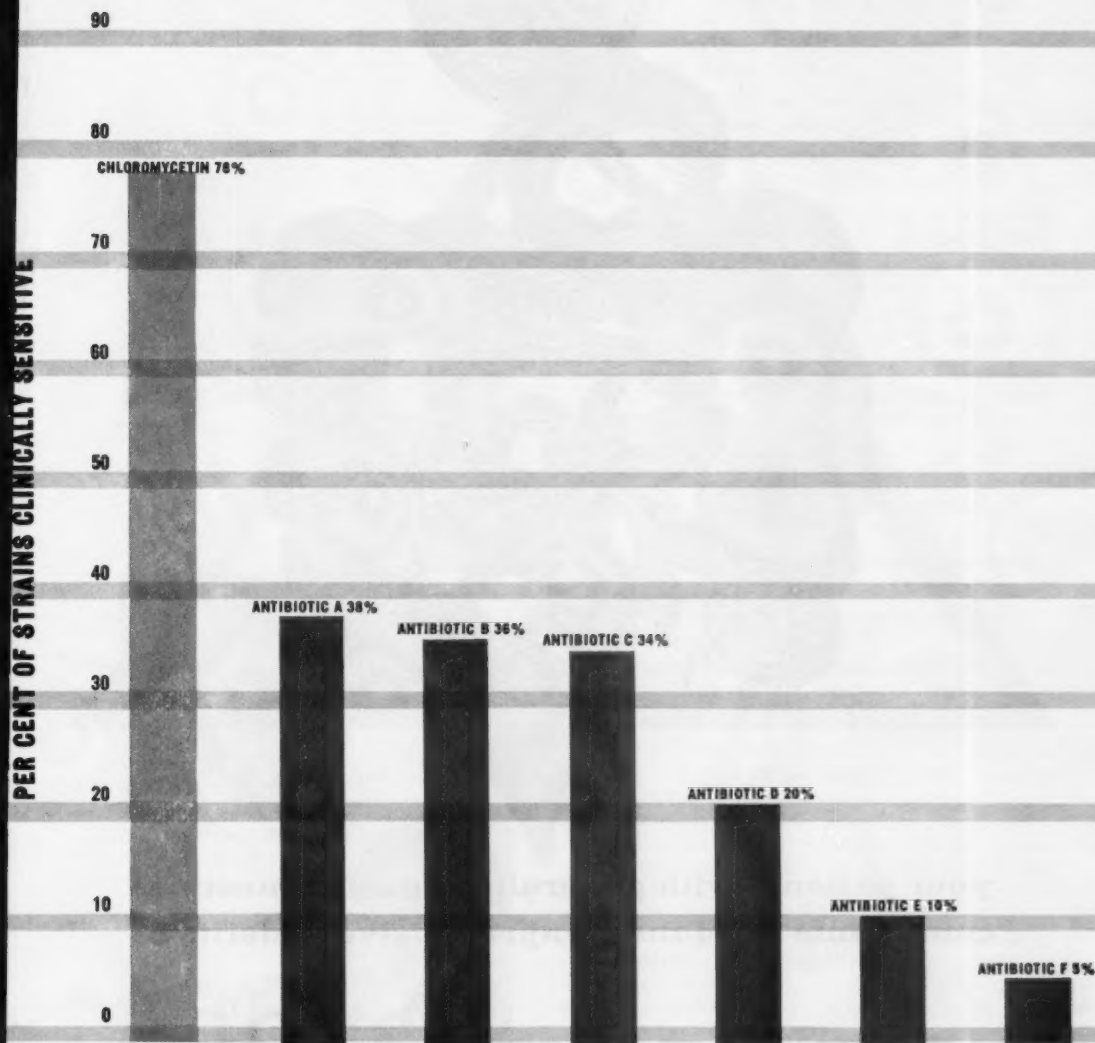
### REFERENCES:

- (1) Petersdorf, R. G.; Bennett, I. L., Jr., & Rose, M. C.: *Bull. Johns Hopkins Hosp.* 100:1, 1957. (2) Yow, E. M.: *GP* 15:102, 1957. (3) Altemeier, W. A., in Welch, H., and Marti-Ibanez, F., ed.: *Antibiotics Annual 1956-1957*, New York, Medical Encyclopedia, Inc., 1957, p. 629. (4) Kempe, C. H.: *California Med.* 84:242, 1956. (5) Spink, W. W.: *Ann. New York Acad. Sc.* 65:175, 1956. (6) Rantz, L. A., & Rantz, H. H.: *Arch. Int. Med.* 97:694, 1956. (7) Wise, R. I.; Cranny, C., & Spink, W. W.: *Am. J. Med.* 20:176, 1956. (8) Smith, R. T.; Platou, E. S., & Good, R. A.: *Pediatrics* 17:549, 1956. (9) Royer, A.: Scientific Exhibit, 89th Ann. Conv. Canad. M. A., Quebec City, Quebec, June 11-15, 1956. (10) Bennett, I. L., Jr.: *West Virginia M. J.* 53:55, 1957. (11) Altemeier, W. A.: *Postgrad. Med.* 20:319, 1956. (12) Felix, N. S.: *Pediat. Clin. North America* 3:317, 1956. (13) Metzger, W. L., & Jenkins, C. J., Jr.: *Pediatrics* 18:929, 1956. (14) Woolington, S. S.; Adler, S. J., & Bower, A. G., in Welch, H., and Marti-Ibanez, F., ed.: *Antibiotics Annual 1956-1957*, New York, Medical Encyclopedia, Inc., 1957, p. 365. (15) Waisbren, B. A., & Strelitzer, C. L.: *Arch. Int. Med.* 99:744, 1957.



PARKE, DAVIS & COMPANY · DETROIT 32, MICHIGAN

# COMPARATIVE SENSITIVITY OF MIXED PROTEUS SPECIES TO CHLOROMYCETIN AND SIX OTHER WIDELY USED ANTIBIOTIC AGENTS\*



\*This graph is adapted from Waibren and Strelitzer.<sup>12</sup> It represents *in vitro* data obtained with clinical material isolated between the years 1951 and 1956. Inhibitory concentrations, ranging from 3 to 25 mcg. per ml., were selected on the basis of usual clinical sensitivity.



**your patients with generalized gastrointestinal  
complaints need the comprehensive benefits of**

# Tridal®

(DACTIL® + PIPTAL® - in one tablet)

rapid, prolonged relief throughout the G.I. tract  
with unusual freedom from antispasmodic  
and anticholinergic side effects

**L LAKESIDE**

14587

One tablet two or three times a day and one at bedtime. Each TRIDAL tablet contains 50 mg. of Dactil, the only brand of N-ethyl-3-piperidyl diphenylacetate hydrochloride, and 5 mg. of Piptal, the only brand of N-ethyl-3-piperidyl-benzilate methobromide.

# THE JOURNAL of the Michigan State Medical Society

VOLUME 56

NOVEMBER, 1957

NUMBER 11

## Contributors to This Issue



W. B. COOKSEY, M.D.



L. A. DROLETT, M.D.



G. S. FITZ-HUGH, M.D.



K. MCMORROW, M.D.



A. C. NOLKE, M.D.

## Table of Contents

The Physician and City Commissions <i>L. A. Drolett, M.D.</i> .....	1393
The Doctor and the Service Club <i>T. E. Schmidt, M.D.</i> .....	1395
The Doctor and the School Board <i>Warren B. Cooksey, M.D.</i> .....	1396
Use of Doxinate with Danthron as Withdrawal Therapy in the Treatment of Chronic Func- tional Constipation <i>Edmund S. Socha, M.D.</i> .....	1397
Tracheotomy: Indications and Comments <i>G. S. Fitz-Hugh, M.D., F.A.C.S., and W. C. McLean, M.D.</i> .....	1400
Official Report of the Opinion Study of Prepaid Medical Care Coverage in Michigan.....	1405
Auricular Septal Defects <i>Anthony C. Nolke, M.D.</i> .....	1437
The Physiatrie Contribution to Geriatrics <i>K. McMorrow, M.D., M.P.H.</i> .....	1440
Wayne State University College of Medicine— Sixth Annual Symposium on Blood, January 18- 19, 1957.....	1444
President's Message Market Research and Medicine's Future.....	1453
High Points of the 92nd Annual Session.....	1454
Editorial: The Doctor as a Citizen.....	1458
Evidences of the Doctor as a Citizen.....	1458
Liberalization .....	1459
Medical Education.....	1459
The Market Opinion Survey.....	1459
Reference Committee on Medical Services and Prepayment Insurance.....	1460
Don't Camouflage Health Care.....	1461
Some Important Actions.....	Insert facing 1460
Michigan's Department of Health.....	1462
In Memoriam.....	1468
News Medical.....	1474
The Doctor's Library.....	1494
You and Your Business.....	1362
Statement of Principles Between Physicians and Lawyers .....	1376
Heart Beats.....	1380
AMA Washington Letter.....	1382
AMA News Notes.....	1388
What They Thought About the 1957 MSMS An- nual Session.....	1390

© 1957 by Michigan State Medical Society

NOVEMBER, 1957

1343

# THE JOURNAL

## of the Michigan State Medical Society

VOLUME 56

NOVEMBER, 1957

NUMBER 11

### PUBLICATION COMMITTEE

B. M. HARRIS, M.D., <i>Chairman</i> .....	Ypsilanti
WILLIAM BROMME, M.D. ....	Detroit
O. B. MCGILLICUDDY, M.D. ....	Lansing
W. S. STINSON, M.D. ....	Bay City
T. P. WICKLIFFE, M.D. ....	Calumet

Office of Publication  
2642 University Avenue  
Saint Paul 14, Minnesota

### Editor

WILFRID HAUGHEY, M.D.  
610 Post Bldg., Battle Creek, Michigan

### Assistant Editor

L. J. BAILEY, M.D.  
620 Vinewood Avenue, Birmingham, Michigan

### Secretary and Business Manager of THE JOURNAL

L. FERNALD FOSTER, M.D.  
441 E. Jefferson, Detroit, Michigan

### Executive Director

WM. J. BURNS, LL.B.  
606 Townsend Street, Lansing 15, Michigan

All communications relative to exchanges, books for review, manuscripts, should be addressed to Wilfrid Haughey, M.D., 610 Post Bldg., Battle Creek, Michigan.

All communications regarding advertising and subscription should be addressed to Wm. J. Burns, 2642 University Avenue, Saint Paul 14, Minnesota, or 606 Townsend Street, Lansing 15, Michigan. Telephone Ivanhoe 57125.

© 1957, by Michigan State Medical Society.

Published monthly by the Michigan State Medical Society as its official journal at 2642 University Avenue, Saint Paul 14, Minnesota.

Entered at the post office at Saint Paul, Minnesota, as second class matter, May 7, 1930, under the Act of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917, authorized August 7, 1918.

Yearly subscription rate, \$6.00; single copies, 60 cents. Additional postage; Canada, \$1.00 per year; Pan-American Union, \$2.50 per year; Foreign, \$2.50 per year.

PRINTED IN U.S.A.

### OFFICERS OF THE SOCIETY

1956-1957

President.....	G. W. SLAGLE, M.D.	Battle Creek
President-Elect.....	G. B. SALTONSTALL, M.D.	Charlevoix
Secretary.....	L. FERNALD FOSTER, M.D.	Detroit
Treasurer.....	W. A. HYLAND, M.D.	Grand Rapids
Speaker.....	K. H. JOHNSON, M.D.	Lansing
Vice Speaker.....	J. J. LIGHTBODY, M.D.	Detroit
Editor.....	WILFRID HAUGHEY, M.D.	Battle Creek
Assistant Editor.....	L. J. BAILEY, M.D.	Detroit

### THE COUNCIL

D. BRUCE WILEY, M.D., <i>Chairman</i> , Utica
W. B. HARM, M.D., <i>Vice Chairman</i> , Detroit
L. FERNALD FOSTER, M.D., <i>Secretary</i> , Bay City

	District		Term Expires
A. E. SCHILLER, M.D.	1st	Detroit	1961
O. B. MCGILLICUDDY, M.D.	2nd	Lansing	1960
H. J. MEIER, M.D.	3rd	Coldwater	1960
RALPH W. SHOOK, M.D.	4th	Kalamazoo	1961
C. ALLEN PAYNE, M.D.	5th	Grand Rapids	1961
H. H. HISCOCK, M.D.	6th	Flint	1961
J. F. BEER, M.D.	7th	St. Clair	1962
E. S. OLDHAM, M.D.	8th	Breckenridge	1962
D. G. PIKE, M.D.	9th	Traverse City	1962
O. J. JOHNSON, M.D.	10th	Bay City	1962
W. M. LEFEVRE, M.D.	11th	Muskegon	1958
B. T. MONTGOMERY, M.D.	12th	Sault Ste. Marie	1958
T. P. WICKLIFFE, M.D.	13th	Calumet	1959
B. M. HARRIS, M.D.	14th	Ypsilanti	1959
D. BRUCE WILEY, M.D.	15th	Utica	1960
G. THOMAS MCKEAN, M.D.	16th	Detroit	1960
W. B. HARM, M.D.	17th	Detroit	1958
WILLIAM BROMME, M.D.	18th	Detroit	1959
G. W. SLAGLE, M.D.		<i>President</i>	Battle Creek
G. B. SALTONSTALL, M.D.		<i>President-Elect</i>	Charlevoix
K. H. JOHNSON, M.D.		<i>Speaker</i>	Lansing
J. J. LIGHTBODY, M.D.		<i>Vice-Speaker</i>	Detroit
L. FERNALD FOSTER, M.D.		<i>Secretary</i>	Detroit
W. A. HYLAND, M.D.		<i>Treasurer</i>	Grand Rapids
ARCH WALLS, M.D.		<i>Past President</i>	Detroit

### EXECUTIVE COMMITTEE OF THE COUNCIL

D. BRUCE WILEY, M.D.	<i>Chairman</i>
W. B. HARM, M.D.	<i>Vice Chairman</i>
W. M. LEFEVRE, M.D.	<i>Chairman, County Societies Committee</i>
B. M. HARRIS, M.D.	<i>Chairman, Publication Committee</i>
RALPH W. SHOOK, M.D.	<i>Chairman, Finance Committee</i>
K. H. JOHNSON, M.D.	<i>Speaker</i>
J. J. LIGHTBODY, M.D.	<i>Vice Speaker</i>
G. W. SLAGLE, M.D.	<i>President</i>
G. B. SALTONSTALL, M.D.	<i>President-Elect</i>
L. FERNALD FOSTER, M.D.	<i>Secretary</i>
W. A. HYLAND, M.D.	<i>Treasurer</i>

### SECTION OFFICERS

<b>Dermatology and Syphilology</b> Coleman Mopper, M.D. .... Detroit <i>Chairman</i> Alice E. Palmer, M.D. .... Detroit <i>Secretary</i>	<b>Nervous and Mental Diseases</b> S. C. Mason, M.D. .... Ann Arbor <i>Chairman</i> S. M. Gould, Jr. .... Ann Arbor <i>Secretary</i>	<b>Public Health and Preventive Medicine</b> J. K. Altland, M.D. .... Lansing <i>Chairman</i> H. B. Robins, M.D. .... Battle Creek <i>Secretary</i>
<b>Gastroenterology and Proctology</b> E. J. Tallant, M.D. .... Detroit <i>Chairman</i> J. F. Wenzel, M.D. .... Detroit <i>Secretary</i>	<b>Occupational Health</b> P. B. Rastello, M.D. .... Detroit <i>Chairman</i> T. I. Boileau, M.D. .... Birmingham <i>Secretary</i>	<b>Radiology, Pathology, Anesthesiology</b> R. R. Benson, M.D. .... Grand Rapids <i>Chairman (Rad.)</i> R. B. Sweet, M.D. .... Ann Arbor <i>Vice Chairman (Anes.)</i> Viola G. Brekke, M.D. .... Highland Park <i>Secretary (Path.)</i>
<b>General Practice</b> E. M. Wakeman, M.D. .... Dearborn <i>Chairman</i> C. W. Royer, M.D. .... Battle Creek <i>Secretary</i>	<b>Ophthalmology and Otolaryngology</b> James E. Coyle, M.D. .... Detroit <i>Chairman (Oto.)</i> H. A. Dunlap, M.D. .... Detroit <i>Co-Chairman (Ophth.)</i> Harold F. Schuknecht, M.D. .... Detroit <i>Secretary (Oto.)</i> F. A. Barbour, M.D. .... Flint <i>Co-Secretary (Ophth.)</i>	<b>Surgery</b> H. M. Bishop, M.D. .... Saginaw <i>Chairman</i> R. F. Salot, M.D. .... Mt. Clemens <i>Secretary</i>
<b>Gynecology and Obstetrics</b> R. W. McClure, M.D. .... Detroit <i>Chairman</i> L. S. Griffith, M.D. .... Grand Rapids <i>Secretary</i>	<b>Pediatrics</b> A. M. Hill, M.D. .... Grand Rapids <i>Chairman</i> G. E. Hause, M.D. .... Detroit <i>Secretary</i>	<b>Urology</b> R. P. Lytle, M.D. .... Detroit <i>Chairman</i> A. W. Bohné, M.D. .... Detroit <i>Secretary</i>
<b>Medicine</b> J. M. Kaufman, M.D. .... Detroit <i>Chairman</i> J. W. Hall, M.D. .... Traverse City <i>Secretary</i>		

### Delegates

W. A. Hyland, M.D., Grand Rapids, <i>Chairman</i> .....	1957
J. S. DeTar, M.D., Milan.....	1957
C. I. Owen, M.D., Detroit.....	1957
W. D. Barrett, M.D., Detroit.....	1958
W. H. Huron, M.D., Iron Mountain.....	1958
R. L. Novy, M.D., Detroit.....	1958

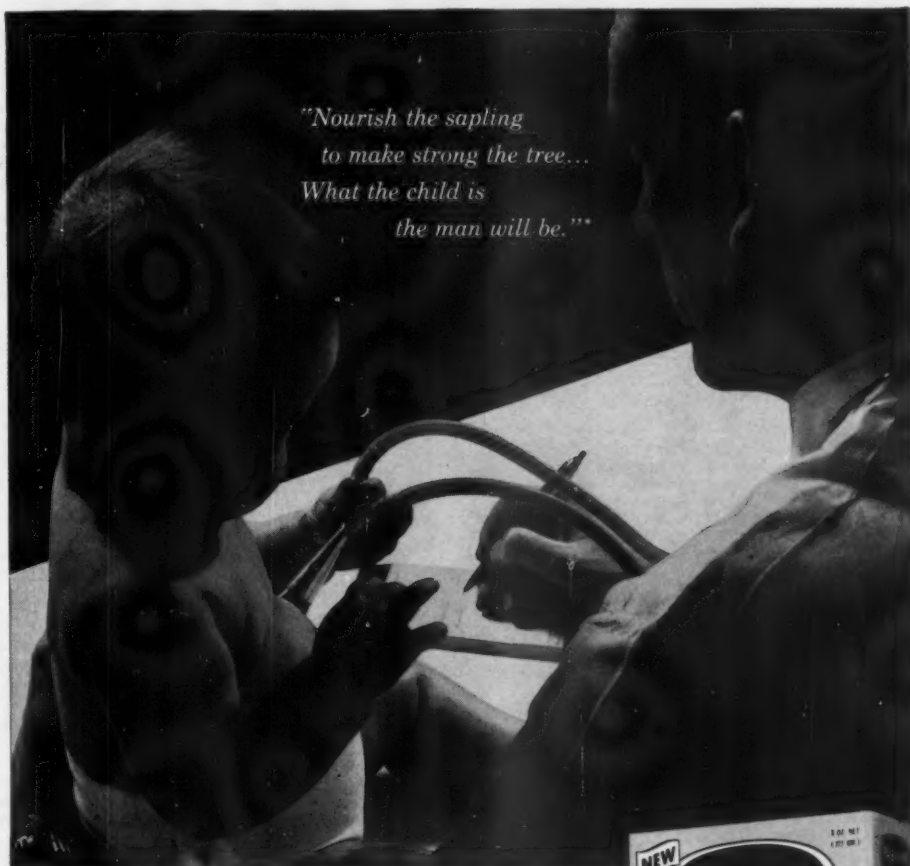
### DELEGATES TO A. M. A.

W. W. Babcock, M.D., Detroit.....	1957
E. F. Sladek, M.D., Traverse City.....	1957
O. J. Johnson, M.D., Bay City.....	1957
William Bromme, M.D., Detroit.....	1958
I. R. Rodger, M.D., Bellaire.....	1958
G. W. Slagle, M.D., Battle Creek.....	1958

### Alternates

### Section Delegate

G. C. Penberthy, M.D. (Surgical Section).....Detroit



*"Nourish the sapling  
to make strong the tree...  
What the child is  
the man will be."*

© 1930 Mead Johnson & Co.

## Newest Pablum Cereal is 35% Protein

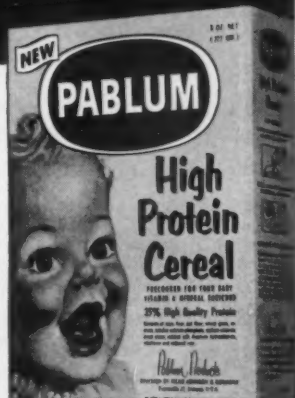
Pablum High Protein Cereal is derived from soy beans, oats, wheat and dried yeast. This new cereal food contains a level of active assimilable protein, 35%, much higher than that commonly present in cereal grains. It helps to keep baby trim. It satisfies baby's hunger over longer periods of time than even foods rich in carbohydrate.

Like all Pablum Cereals, Pablum High Protein Cereal is made by nutritional and pharmaceutical specialists.

You can specify **PABLUM** with confidence!

*Pablum Products*

DIVISION OF MEAD JOHNSON & CO., EVANSVILLE, IND. • Manufacturers of Nutritional and Pharmaceutical Products



## MSMS Committee Personnel 1957-1958

### RHEUMATIC FEVER CONTROL COMMITTEE

- S. T. Harris, M.D., *Chairman*.....220 Pearl St., Ypsilanti  
R. E. Fisher, M.D., *Vice Chairman*.....158 Capitol Ave.  
N.E., Battle Creek  
E. W. Adams, M.D.....517 Wildwood Ave., Jackson  
R. R. Barber, M.D.....504 S. Main St., Plymouth  
J. G. Bielawski, M.D.....922 Maccabees Bldg., Detroit  
R. P. Bolton, M.D.....19566 Grand River Ave., Detroit  
D. R. Boyd, M.D.....1735 Peck St., Muskegon  
Carleton Dean, M.D.....252 Hollister Bldg., Lansing  
T. B. Hill, M.D.....103 W. Main St., Lowell  
C. L. Hoogerland, M.D.....303 W. Superior St., Alma  
J. D. Littig, M.D.....1708 Embury Road, Kalamazoo  
N. L. Matthews, M.D.....St. Luke's Hospital, Marquette  
W. B. Prothro, M.D.....303 Ionia St. N.E.,  
Grand Rapids  
H. H. Riecker, M.D.....St. Joseph's Mercy Hospital,  
Ann Arbor  
E. E. Schumacher, Jr., M.D.....833 Lake Drive, S.E.,  
Grand Rapids  
D. S. Smith, M.D.....824 Riker Building, Pontiac  
R. M. Stow, M.D.....512 Michigan Nat. Tower, Lansing  
B. J. Sweeney, M.D.....1100 Sixth, Traverse City  
R. D. Tupper, M.D.....15101 W. Seven Mile Rd., Detroit  
Mr. James Gerity, Jr., *Advisor*.....Gerity-Michigan Corp.,  
Adrian

## VENEREAL DISEASE CONTROL COMMITTEE

- |  |   |
|--|---|
| Frank Stiles, Jr., M.D., <i>Chairman</i> ..... | 2014 Michigan<br>National Tower, Lansing  |
| V. W. Cambridge, M.D.....                      | 727 N. Jefferson Ave., Saginaw            |
| J. A. Cowan, M.D.....                          | Michigan Dept. of Health, Lansing         |
| A. C. Curtis, M.D.....                         | University Hospital, Ann Arbor            |
| R. H. Grekin, M.D.....                         | 136 E. Michigan Ave., Kalamazoo           |
| P. J. Hettle, M.D.....                         | Savings Bank Bldg., Marquette             |
| H. L. Keim, M.D.....                           | 1110 David Broderick Tower,<br>Detroit 26 |
| L. W. Shaffer, M.D.....                        | 325 Kercheval, Grose Pointe<br>Farms 36   |
| H. C. Tellman, M.D.....                        | 706 Hackley Union Bank Bldg.,<br>Muskegon |
| Kornelius VanGoor, M.D.....                    | 213 Medical Arts Bldg.,<br>Grand Rapids   |
| R. S. Breakey, M.D., <i>Advisor</i> .....      | 520 Westmoreland,<br>Lansing              |

## TUBERCULOSIS CONTROL COMMITTEE

- R. L. Rapport, M.D., *Chairman*.....715 Mott Foundation  
Building, Flint  
R. M. Bates, M.D.....1820 E. Michigan, Lansing  
Abraham Becker, M.D.....1414 David Broderick Tower,  
Detroit  
M. B. Conover, M.D.....312 Paterson Bldg., Flint  
W. N. Davey, M.D.....University Hospital, Ann Arbor  
J. L. Egle, M.D.....Northern Mich. TB Sanatorium,  
Gaylord  
J. L. Isbister, M.D.....Michigan Dept. of Health, Lansing  
Louis Jaffe, M.D.....1002 David Whitney Bldg., Detroit 26  
A. H. Kempter, M.D.....1200 Lake Drive S.E.,  
Grand Rapids  
G. H. Phillips, M.D.....Tuberculosis Sanatorium, Jackson  
R. A. Rasmussen, M.D.....1810 Wealthy St. S.E.,  
Grand Rapids  
A. F. Stiller, M.D.....Southwestern Mich. TB Sanatorium,  
Kalamazoo  
C. J. Stringer, M.D.....401 W. Greenlawn Ave., Lansing  
J. W. Towey, M.D.....Pinecrest Sanitarium, Powers  
Jack Foy Wu, M.D.....810 E. Centre Ave., Kalamazoo  
S. A. Yannitelli, M.D.....1331 W. Mich. Ave., Battle Creek  
Stewart Yntema, M.D.....331 S. Jefferson Ave., Saginaw  
G. T. McKean, M.D., *Advisor*.....1515 David Whitney  
Bldg., Detroit 26

### MATERNAL HEALTH COMMITTEE

- |   |  |
|---|--|
| F. A. Jones, Jr., M.D., <i>Chairman</i> ..... | 716 Michigan Nat'l<br>Tower, Lansing         |
| H. A. Ott, M.D., <i>Vice Chairman</i> .....   | 3019 N. Woodward<br>Ave., Royal Oak          |
| F. W. Bald, M.D.....                          | 610 Mott Foundation Bldg., Flint             |
| C. A. Behney, M.D.....                        | Mich. Dept. of Health, Lansing               |
| C. M. Bell, M.D.....                          | 12-18 Monroe Ave. N.E.,<br>Grand Rapids      |
| H. R. Brukardt, M.D.....                      | Electric Square Bldg.,<br>Menominee          |
| Goldie B. Corneliuson, M.D.....               | Mich. Dept. of Health,<br>Lansing            |
| A. L. Foley, M.D.....                         | Rogers City                                  |
| W. F. Gains, M.D.....                         | 6675 Tireman, Detroit                        |
| J. E. Harriman, M.D.....                      | 1129 Peck St., Muskegon                      |
| E. F. Hersey, M.D.....                        | 516 Whites Road, Kalamazoo                   |
| H. W. Longyear, M.D.....                      | 3019 North Woodward Ave.,<br>Royal Oak       |
| A. G. McQuaig, M.D.....                       | 719 S.W. Capitol Ave.,<br>Battle Creek       |
| N. F. Miller, M.D.....                        | University Hospital, Ann Arbor               |
| H. R. Mooi, M.D.....                          | 292 E. Chicago, Coldwater                    |
| H. W. Sill, M.D.....                          | 290 W. Michigan, Jackson                     |
| P. S. Sloan, M.D.....                         | 214 Clark St., Houghton                      |
| Mary C. Stelhorn, M.D.....                    | 16616 Mack Ave., Detroit                     |
| C. S. Stevenson, M.D.....                     | 1405 Kales Bldg., Detroit                    |
| P. E. Sutton, M.D.....                        | 629 Washington Square Building,<br>Royal Oak |
| D. W. Thorup, M.D.....                        | 610 Fidelity Bldg., Benton Harbor            |
| J. H. Tisdell, M.D.....                       | 310 E. Water St., Port Huron                 |
| Kathryn D. Weburg, M.D.....                   | Petoskey                                     |
| H. R. Williams, M.D.....                      | 1950 Manchester Rd., Ann Arbor               |
| Mary Lou Byrd, M.D., <i>Advisor</i> .....     | 700 Kent Hills Drive,<br>N.E., Grand Rapids  |
| J. V. Fopeano, M.D., <i>Advisor</i> .....     | 815 Am. Nat'l Bank<br>Bldg., Kalamazoo       |

## CANCER CONTROL COMMITTEE

- |   |  |
|---|--|
| M. A. Darling, M.D., <i>Chairman</i> .....    | 673 Fisher Building,<br>Detroit 2                |
| J. W. Hubby, M.D., <i>Vice Chairman</i> ..... | 1407 Security Nat'l.<br>Bank Bldg., Battle Creek |
| F. W. Bald, M.D.....                          | 610 Mott Foundation Bldg., Flint                 |
| R. E. Carlson, M.D.....                       | Community Bank Building,<br>Iron Mountain        |
| E. I. Carr, M.D.....                          | 300 W. Ottawa St., Lansing                       |
| F. C. Cretsingier, M.D.....                   | 224 E. Cedar St., Kalamazoo                      |
| R. J. Fortner, M.D.....                       | 137 Portage St., Three Rivers                    |
| J. H. Fyvie, M.D.....                         | 202 S. Cedar St., Manistique                     |
| L. E. Holly, M.D.....                         | 878 N. Second St., Muskegon                      |
| M. N. Hoyt, M.D.....                          | 804 Huron Ave., Port Huron                       |
| Cr. D. E. Johnson.....                        | 211 E. Court St., Flint                          |
| H. M. Nelson, M.D.....                        | 1067 Fisher Bldg., Detroit 2                     |
| R. E. Olsen, M.D.....                         | St. Joseph Mercy Hosp., Pontiac                  |
| H. M. Pollard, M.D.....                       | University Hospital, Ann Arbor                   |
| L. W. Reus, M.D.....                          | 226 Park Ave., Petoskey                          |
| E. M. Wright, M.D.....                        | 404 S. Warren, Saginaw                           |
| W. A. Hyland, M.D., <i>Advisor</i> .....      | 110 E. Fulton St.,<br>Grand Rapids               |

## IODIZED SALT COMMITTEE

- B. E. Brush, M.D., *Chairman*.....2799 W. Grand Blvd.,  
Detroit  
H. A. Towsley, M.D., *Vice Chairman*.....University Hosp.,  
Ann Arbor  
L. A. Berg, M.D. ....106 E. Chicago, Sturgis  
J. B. Blodgett, M.D. ....606 Kales Bldg., Detroit 26  
J. R. Carney, M.D. ....202 N. Park St., Ludington  
R. C. Moehlig, M.D. ....964 Fisher Bldg., Detroit 2  
R. L. Rapport, M.D. ....715 Mott Foundation Bldg., Flint  
R. L. Waggoner, M.D. ....120 W. Center St., St. Louis

(Continued on Page 1348)

# NEW HYDELTRA-T.B.A.

(Prednisolone tertiary-butylacetate, Merck)

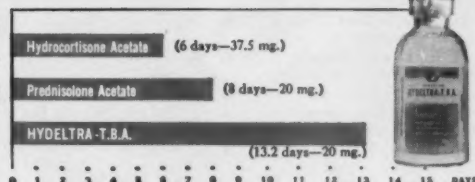
for relief that lasts—longer

in *SPRAINS*—  
reduces tenderness,  
swelling and  
limitation of motion



Osteoarthritis  
Acute gouty arthritis  
Bursitis  
Tendinitis  
Trigger finger  
Peritendinitis  
Trigger points  
Tennis elbow  
Lumbosacral strain  
Capsulitis  
Rheumatoid arthritis  
Frozen shoulder  
Coccydynia  
Rheumatoid nodules  
Fibrositis  
Tensor fascia lata syndrome  
Collateral ligament strains  
Sprains  
Radiculitis  
Osteochondritis  
Ganglia

Anti-inflammatory  
effect lasts longer  
than that provided  
by any other  
steroid ester



**Dosage:** the usual intra-articular, intra-bursal or soft tissue dose ranges from 20 to 30 mg. depending on location and extent of pathology.

**Supplied:** Suspension 'HYDELTRA'-T.B.A.—20 mg./cc. of prednisolone tertiary-butylacetate, in 5-cc. vials.



**MERCK SHARP & DOHME**  
DIVISION OF MERCK & CO., INC.  
PHILADELPHIA 3, PA.

# MSMS COMMITTEE PERSONNEL 1957-1958

(Continued from Page 1346)

## INDUSTRIAL HEALTH COMMITTEE

- D. F. Kudner, M.D., *Chairman*.....435 Wildwood Ave.,  
Jackson  
S. E. Andrews, M.D.....224 E. Cedar St., Kalamazoo  
J. G. Beall, M.D.....118½ E. Front St., Traverse City  
T. I. Boileau, M.D.....2075 E. Fourteen Mile Rd.,  
Birmingham  
H. S. Brown, M.D.....18101 James Couzens Highway  
Detroit  
M. R. Burnell, M.D.....3301 Westwood Parkway, Flint  
E. B. Cudney, M.D.....Pontiac Motor Co., Pontiac  
E. A. Irvin, M.D.....Ford Motor Company, Dearborn  
F. E. Kolb, M.D.....128 Calumet, Calumet  
C. P. McCord, M.D.....University Hospital, Ann Arbor  
G. P. Moore, M.D.....302 E. Chapin, Cadillac  
R. D. Mudd, M.D.....Chevrolet Grey Iron Foundry,  
Saginaw  
P. J. Ochsner, M.D.....Fisher Body Plant, Lansing  
H. A. Pinkerton, M.D.....Newport Hospital, Ironwood  
O. J. Preston, M.D.....300 N. Chevrolet Ave., Flint  
D. M. Richmond, M.D.....314½ State St., St. Joseph  
N. W. Scholle, M.D.....2500 Peck St., Muskegon Heights  
M. W. Shellman, M.D.....110 E. Fulton St., Grand Rapids  
S. D. Steiner, M.D.....Oldsmobile Division, Lansing  
William E. VanGelder, M.D.....Hackley Union Bank  
Bldg., Muskegon  
C. D. Selby, M.D., *Advisor*.....1916 Military St.,  
Port Huron

## MENTAL HEALTH COMMITTEE

- I. A. LaCore, M.D., *Chairman*.....Pontiac State Hosp.,  
Pontiac  
Z. S. Bohn, M.D., *Vice Chairman*.....327 Professional Bldg.,  
Detroit 1  
C. P. Barker, M.D.....318 Wabeek Bldg., Birmingham  
H. W. Bird, M.D.....1313 E. Ann St., Ann Arbor  
P. N. Brown, M.D.....Northville State Hosp., Northville  
W. E. Clark, M.D.....136 W. Ash St., Mason  
R. O. Creager, M.D.....909 Wheaton, Kalamazoo  
J. M. Dorsey, M.D.....65 Moss St., Highland Park 3  
N. A. Fleishman, M.D.....1094 Jefferson, Muskegon  
T. J. Heldt, M.D.....Henry Ford Hospital, Detroit 2  
L. N. Hershey, M.D.....Route 1, 31275 Franklin Rd.,  
Birmingham  
L. E. Himler, M.D.....Mercywood Hospital, Ann Arbor  
W. T. Hyslop, M.D.....1469 N. Harrison, Saginaw  
R. A. Jaarsma, M.D.....1604 Mott Fdtn. Bldg., Flint  
R. F. Kernkamp, M.D.....1204 David Broderick Tower,  
Detroit 26  
M. H. Marks, M.D.....8233 W. Chicago, Detroit 4  
F. O. Meister, M.D.....806 Security Tower, Battle Creek  
C. J. Mumby, M.D.....1409 Pontiac State Bank Bldg.,  
Pontiac  
W. H. Obenauf, M.D.....Ypsilanti State Hosp., Ypsilanti  
R. W. Waggoner, M.D.....University Hosp., Ann Arbor  
H. B. Zemmer, M.D., *Advisor*.....311 Clay St., Lapeer

## SCIENTIFIC RADIO COMMITTEE

- H. A. Towsley, M.D., *Chairman*.....University Hospital,  
Ann Arbor  
C. B. Beeman, M.D.....833 Lake Drive, S.E., Grand Rapids  
S. J. Behrman, M.D.....University Hospital, Ann Arbor  
J. H. Buell, M.D.....901 David Whitney Bldg., Detroit 26  
C. G. Callander, M.D.....4418 Lake Forest Dr., Kalamazoo  
C. T. Flotte, M.D.....University Hospital, Ann Arbor  
W. L. Foster, M.D.....2567 W. Grand Blvd., Detroit 8  
G. H. Scott, Ph.D.....Dean, Wayne State Univ. College  
of Medicine, Detroit  
J. M. Sheldon, M.D.....University Hospital, Ann Arbor  
R. W. Teed, M.D.....215-A S. Main, Ann Arbor  
K. W. Toothaker, M.D.....930 N. Washington Ave.,  
Lansing

## CHILD WELFARE COMMITTEE

- R. M. Heavenrich, M.D., *Chairman*.....529 W. Genesee,  
Saginaw  
W. S. Jones, Jr., M.D., *Vice Chairman*.....1146 Tenth  
Ave., Menominee  
C. E. Booher, M.D.....1810 Wealthy St. S.E.,  
Grand Rapids  
V. G. Chabut, M.D.....206 W. Dunlap, Northville  
H. C. Comstock, M.D.....1031 E. Michigan Ave., Lansing  
E. L. Cooper, M.D.....414 David Whitney Bldg.,  
Detroit 26  
Goldie B. Corneliussen, M.D.....Mich. Dept. of Health,  
Lansing  
A. J. Cortopassi, M.D.....324 S. Washington, Saginaw  
Carleton Dean, M.D.....252 Hollister Bldg., Lansing  
N. E. Durocher, M.D.....605 Pontiac State Bank Bldg.,  
Pontiac  
R. G. Ferris, M.D.....55 W. Maple, Birmingham  
A. C. Gholz, M.D.....208 Sperry Bldg., Port Huron  
J. P. Klein, M.D.....16 Sheridan, Fremont  
O. L. Lepard, M.D.....104 S. Lakeview, Sturgis  
F. J. Margolis, M.D.....2901 S. Westnedge, Kalamazoo  
Don Marshall, M.D.....252 E. Lovell St., Kalamazoo  
R. J. Mason, M.D.....618 N. Woodward Ave., Birmingham  
J. C. Montgomery, M.D.....1810 Wealthy St. S.E.,  
Grand Rapids  
W. J. Morrow, M.D.....119 N. James St., Ludington  
M. H. Pike, M.D.....224 E. Larkin St., Midland  
H. A. Towsley, M.D.....University Hospital, Ann Arbor  
R. H. Trimby, M.D.....122 W. Hillsdale, Lansing  
A. L. Tuuri, M.D.....Mott Clinic, Hurley Hosp., Flint  
E. H. Watson, M.D.....280 N. Barton Drive, Ann Arbor  
C. F. Wible, M.D.....Sebewaing  
R. K. Wise, M.D.....15801 W. McNichols, Detroit 35
- ## GERIATRICS COMMITTEE
- A. Hazen Price, M.D., *Chairman*.....62 W. Kirby,  
Detroit 2  
F. C. Swartz, M.D., *Vice Chairman*.....215 N. Walnut St.,  
Lansing  
F. W. Baske, M.D.....923 Maxine St., Flint  
H. B. Bennett, M.D.....942 Maccabees Bldg., Detroit 2  
J. R. Brink, M.D.....54 College Ave. S.E., Grand Rapids  
S. E. Chapin, M.D.....10149 Michigan Ave., Detroit  
E. F. Crippen, M.D.....126½ State St., Mancelona  
P. C. Gittins, M.D.....732 Maccabees Bldg., Detroit 2  
W. D. Harrelson, M.D.....136 E. Michigan Ave., Kalamazoo  
A. H. Hirschfeld, M.D.....829 Fisher Bldg., Detroit  
Jack Rom, M.D.....8600 W. McNichols Rd., Detroit 35  
Herbert Rosenbaum, M.D.....19776 Snowden Ave.,  
Detroit 35  
C. H. Ross, M.D.....715 University Ave. N., Ann Arbor  
L. F. Segar, M.D.....1410 David Broderick Tower,  
Detroit 26  
C. W. Sellers, M.D.....2314 W. Grand Blvd., Detroit 8  
K. S. Wemmer, M.D.....1501 W. Michigan Ave., Battle  
Creek  
S. C. Wiersma, M.D.....Hackley Union Bldg., Muskegon  
H. W. Woughter, M.D.....1312 Mott Foundation Bldg.,  
Flint
- ## PUBLIC RELATIONS COMMITTEE
- R. W. Teed, M.D., *Chairman*.....215-A S. Main St.,  
Ann Arbor  
A. B. Gwinn, M.D., *Vice Chairman*.....City Bank Bldg.,  
Hastings  
S. E. Andrews, M.D.....224 E. Cedar St., Kalamazoo  
H. G. Bacon, Jr., M.D.....Scottville  
J. F. Beer, M.D.....104 N. Riverside Drive, St. Clair  
H. G. Benjamin, M.D.....72 Sheldon Avenue, S.E., Grand  
Rapids  
F. C. Brace, M.D.....1498 Lake Drive, S.E., Grand Rapids  
H. F. Bradfield, M.D.....510 E. Warren, Detroit  
M. W. Buckborough, M.D.....South Haven  
F. J. Busch, M.D.....1731 N. Michigan Ave., Saginaw  
S. E. Chapin, M.D.....10149 Michigan Ave., Dearborn

(Continued on Page 1350)

outstanding  
appetite  
stimulant

# INCREMIN\*

LYSINE-VITAMIN SUPPLEMENT LEDERLE

Problems arise, the underweight, and generally below normal persons of all ages respond to INCREMIN.

INCREMIN offers L-lysine for protein utilization, and essential vitamins noted for outstanding ability to stimulate appetite, overcome anorexia.

Effectively INCREMIN in either Drops (cherry flavor) or Tablets (cherry flavor). Same formula. Tablets, liquid, or drops may be orally dissolved, chewed, or swallowed. Drops, if necessary, may be mixed with milk, milk formula, or other fluid, infused in 15 cc. polyethylene dropper.

Each INCREMIN Tablet

or each cc. of INCREMIN Drops contains:

10 mg.	25 mg.	Pyridoxine (B6)	4 mg.
ascorbic acid	INCREMIN Drops contain 10 mg.	thiamine (B1)	1 mg.
niacin (B3)	10 mg.	riboflavin (B2)	1 mg.
		vitamin B12	100 mcg.

Do not use only 1 INCREMIN TABLET or 10-20 INCREMIN DROPS daily.

Lederle

LEDERLE LABORATORIES DIVISION  
AMERICAN CYANAMID COMPANY  
FRANKLIN, NEW YORK



# MSMS COMMITTEE PERSONNEL 1957-1958

(Continued from Page 1348)

## PUBLIC RELATION'S COMMITTEE

(Continued)

G. A. Drake, M.D.....1109 E. Mitchell St., Petoskey  
H. D. Dykhuizen, M.D.....710 Hackley Union Bldg.,  
Muskegon  
E. H. Fenton, M.D.....15125 Grand River Ave., Detroit  
R. A. Frary, M.D.....423 E. Elm Ave., Monroe  
W. G. Gamble, Jr., M.D.....2010 Fifth Ave., Bay City  
L. E. Grate, M.D.....112 Clinton St., Charlevoix  
H. C. Hanson, M.D.....417 Post Bldg., Battle Creek  
L. T. Henderson, M.D.....14814 E. Warren, Detroit  
W. J. Herrington, M.D.....Bad Axe  
E. J. Hill, M.D.....1536 David Whitney Bldg., Detroit 26  
J. M. Jacobowitz, M.D.....49½ N. Main St., Three Rivers  
K. H. Johnson, M.D.....1116 Michigan National Tower,  
Lansing 8  
R. C. Kingswood, M.D.....90 E. Warren, Detroit 1  
David Kahn, M.D.....401 American State Bank Bldg.,  
Lansing  
J. L. Leach, M.D.....3007 Industrial Avenue, Flint  
E. C. Long, M.D.....2626 Rochester, Detroit  
F. E. Ludwig, M.D.....916 Seventh St., Port Huron  
G. E. Millard, M.D.....2900 W. Grand Blvd., Detroit 2  
E. S. Oldham, M.D.....Breckenridge, Michigan  
E. S. Parmenter, M.D.....P.O. Box 192, Alpena  
R. C. Peckham, M.D.....Gaylord  
G. N. Petroff, M.D.....1301 Pontiac State Bank Bldg.,  
Pontiac  
A. C. Pfeifer, M.D.....11610 N. Saginaw, Mt. Morris  
Harold Plotnick, M.D.....17554 Indiana, Detroit 21  
W. Z. Rundles, Sr., M.D.....304 First National Bank Bldg.,  
Flint  
Sydney Scher, M.D.....132 Cass Ave., Mt. Clemens  
J. M. Sheldon, M.D.....University Hospital, Ann Arbor  
E. L. Spoehr, M.D.....22832 Woodward Ave., Ferndale  
W. F. Strong, M.D.....800 Chippewa St., Ontonagon  
C. K. Stroup, M.D.....2002 Court St., Flint 3  
R. L. Thirby, M.D.....711 Second St., Traverse City  
C. L. Weston, M.D.....Matthews Bldg., Owosso  
J. A. Witter, M.D.....344 Glendale, Detroit 3  
V. M. Zerbi, M.D.....315 N. Adams St., Ypsilanti  
L. Fernald Foster, M.D., *Advisor*.....441 E. Jefferson,  
Detroit  
H. J. Meier, M.D., *Advisor*.....87 W. Pearl St., Coldwater  
B. T. Montgomery, M.D., *Advisor*.....301 E. Spruce St.,  
Sault Ste. Marie  
A. E. Schiller, M.D., *Advisor*.....1737 David Whitney Bldg.,  
Detroit  
T. P. Wickliffe, M.D., *Advisor*.....1167 Calumet Ave.,  
Calumet

## PREVENTIVE MEDICINE COMMITTEE

W. S. Reveno, M.D., *Chairman*.....958 Fisher Bldg.,  
Detroit 2  
I. A. LaCore, M.D., *Vice Chairman*.....Pontiac State Hosp.,  
Pontiac  
B. E. Brush, M.D.....2799 W. Grand Blvd., Detroit  
M. A. Darling, M.D.....673 Fisher Bldg., Detroit 2  
R. R. Dew, M.D.....252 E. Lovell, Kalamazoo  
S. T. Harris, M.D.....220 Pearl, Ypsilanti  
R. M. Heavenrich, M.D.....529 W. Genesee, Saginaw  
A. E. Heustis, M.D.....Michigan Dept. of Health, Lansing  
F. A. Jones, Jr., M.D.....716 Michigan National Tower,  
Lansing  
D. F. Kudner, M.D.....435 Wildwood Ave., Jackson  
M. B. Meengs, M.D.....1725 Peck St., Muskegon  
A. H. Price, M.D.....62 W. Kirby, Detroit  
W. B. Prothro, M.D.....303 Ionia Ave., N.W., Grand  
Rapids  
R. L. Rapport, M.D.....715 Mott Foundation Bldg., Flint  
J. M. Sheldon, M.D.....University Hospital, Ann Arbor  
Frank Stiles, Jr., M.D.....2014 Michigan National Tower,  
Lansing  
H. A. Towsley, M.D.....University Hospital, Ann Arbor

## POSTGRADUATE MEDICAL EDUCATION COMMITTEE

J. M. Sheldon, M.D., *Chairman* (1959).....University  
Hospital, Ann Arbor  
E. I. Carr, M.D., *Vice Chairman* (1958).....300 W.  
Ottawa St., Lansing  
D. A. Cameron, M.D. (1958).....23401 Ford Rd.,  
Dearborn  
H. H. Cummings, M.D. (1958).....216 S. State St.,  
Ann Arbor  
M. A. Darling, M.D. (1958).....673 Fisher Bldg., Detroit  
A. C. Furstenberg, M.D. (1960).....University Hospital,  
Ann Arbor  
J. R. Heidenreich, M.D. (1959).....Daggett  
D. H. Kaump, M.D. (1959).....Providence Hospital,  
Detroit  
R. M. McKean, M.D. (1958).....1515 David Whitney  
Building, Detroit  
D. W. McLean, M.D. (1959).....1066 Fisher Bldg.,  
Detroit  
E. J. Neill, M.D. (1958).....8045 E. Jefferson, Detroit  
F. P. Rhoades, M.D. (1959).....970 Maccabees Bldg.,  
Detroit  
J. M. Robb, M.D. (1960).....633 David Whitney Bldg.,  
Detroit  
G. H. Scott, Ph.D. (1958).....1401 Rivard, Detroit  
R. M. Stow, M.D. (1958).....512 Michigan Nat'l Tower,  
Lansing  
H. A. Towsley, M.D. (1960).....University Hospital,  
Ann Arbor  
E. G. Upjohn, M.D. (1958).....301 Henrietta St.,  
Kalamazoo  
S. B. Winslow, M.D. (1960).....1509 Security Nat'l Bank  
Bldg., Battle Creek

## ETHICS COMMITTEE

H. W. Porter, M.D., *Chairman* (1958).....505 Wildwood  
Ave., Jackson  
W. L. Harrigan, M.D., *Vice Chairman* (1958).....408 E.  
Broadway, Mt. Pleasant  
F. M. Doyle, M.D. (1961).....611 Howard St., Kalamazoo  
R. J. Hubbell, M.D. (1959).....252 E. Lovell St.,  
Kalamazoo  
F. H. Lindenfeld, M.D. (1958).....8 N. St. Joseph, Niles  
J. D. Miller, M.D. (1958).....50 College Ave., S.E.,  
Grand Rapids  
E. A. Oakes, M.D. (1960).....401 River St., Manistee  
E. A. Osius, M.D. (1960).....901 David Whitney Bldg.,  
Detroit  
A. H. Price, M.D. (1958).....62 W. Kirby, Detroit  
P. K. Stevens, M.D. (1961).....201 Michigan Theater  
Bldg., Flint  
W. F. Strong, M.D. (1960).....800 Chippewa St.,  
Ontonagon  
C. E. Umphrey, M.D. (1959).....15300 W. McNichols Rd.,  
Detroit  
M. R. Weed, M.D. (1958).....1997 E. Grand Blvd.,  
Detroit

## LEGISLATIVE COMMITTEE

L. A. Drolett, M.D., *Chairman*.....3526 W. Saginaw St.,  
Lansing  
O. B. McGillicuddy, M.D., *Vice Chairman*.....1816 Mich.  
Nat'l Tower, Lansing  
A. B. Aldrich, M.D.....503 Sheldon Ave., Houghton  
J. J. Boccia, M.D.....15761 E. Warren, Detroit  
William Bromme, M.D.....10 Peterboro, Detroit 1  
G. V. Conover, M.D.....420 Genesee Bank Bldg., Flint  
J. C. Elliott, M.D.....207½ E. Front St., Buchanan  
O. K. Engelke, M.D.....720 E. Catherine St., Ann Arbor  
E. J. Hammer, M.D.....16616 Mack Ave., Detroit  
N. J. Hershey, M.D.....122 Grant St., Niles  
J. J. Kane, M.D.....179 Strong Ave., Muskegon  
G. T. Kelleher, M.D.....613 Post Bldg., Battle Creek  
P. T. Mulligan, M.D.....91 Cass St., Mt. Clemens

# MSMS COMMITTEE PERSONNEL 1957-1958

## LEGISLATIVE COMMITTEE

(Continued)

J. S. Rozan, M.D.....511 Bank of Lansing Bldg., Lansing  
E. W. Schnoor, M.D.....26 Sheldon Ave. S.E.,  
Grand Rapids  
H. A. Towsley, M.D.....University Hosp., Ann Arbor  
R. V. Walker, M.D.....1255 David Whitney Bldg.,  
Detroit 26  
D. B. Wiley, M.D.....45310 Van Dyke, Utica

## ADVISORY COMMITTEE TO WOMAN'S AUXILIARY

E. H. Fuller, Jr., M.D., *Chairman*.....74-88 Ionia Ave.  
N.W., Grand Rapids  
A. B. Aldrich, M.D.....503 Sheldon Ave., Houghton  
J. S. Rozan, M.D.....511 Bank of Lansing Bldg., Lansing  
D. A. Young, M.D.....14807 W. McNichols Rd., Detroit

## ADVISORY COMMITTEE TO MICHIGAN STATE MEDICAL ASSISTANTS SOCIETY

J. W. Rice, M.D., *Chairman*.....421 McNeal St., Jackson  
Ralph W. Shook, M.D., *Vice Chairman*.....136 E.  
Michigan Ave., Kalamazoo  
J. E. Manning, M.D.....815 N. Michigan, Saginaw  
E. R. Sherrin, M.D.....17555 James Couzens Highway,  
Detroit  
T. J. Trapasso, M.D.....521 Ashmun St., Sault Ste. Marie  
Otto van der Velde, M.D.....35 W. Eighth St., Holland  
J. E. Webber, M.D.....310 E. Fulton St., Grand Rapids

## MEDIATION COMMITTEE

L. R. Leader, M.D., *Chairman*.....1129 David Whitney  
Bldg., Detroit 26  
D. R. Boyd, M.D.....1735 Peck St., Muskegon  
A. E. Gamon, M.D.....2004 Court St., Saginaw  
Jack Hoogerhyde, M.D.....124 E. Fulton St., Grand Rapids  
E. B. Johnson, M.D.....412 Water St., Allegan

David McTaggart, M.D.....1604 Mott Fndn. Bldg., Flint  
R. W. Teed, M.D.....215 S. Main St., Ann Arbor  
Charles TenHouten, M.D.....Paw Paw

## STUDY ON PREVENTION OF HIGHWAY ACCIDENTS COMMITTEE

J. R. Rodger, M.D., *Chairman*.....Bellaire  
G. H. Agate, M.D.....Mich. Dept. of Health, Lansing  
H. E. DePree, M.D.....216 Bronson Med. Ctr., Kalamazoo  
J. H. Ganschow, M.D.....10025 Nadine, Huntington Woods  
W. N. Herbert, M.D.....1223 S. Park St., Kalamazoo  
A. Z. Howard, M.D.....825 David Whitney Bldg.,  
Detroit 26  
H. T. Johnson, Jr., M.D.....1439 E. Mich. Ave., Lansing  
E. F. Kickham, M.D.....309 S. Jefferson Ave., Saginaw  
E. J. Lauretti, M.D.....815 Hackley Union Bldg.,  
Muskegon  
Sidney N. Lyttle, M.D.....615 Mott Fndn. Bldg., Flint  
W. D. Peterson, M.D.....Box 58, Mesick  
C. W. Sellers, M.D.....2314 W. Grand Blvd., Detroit 8  
H. J. Meier, M.D., *Advisor*.....87 W. Pearl St., Coldwater

## STUDY COMMITTEE ON FEE SCHEDULES FOR MICHIGAN MEDICAL SERVICE

I. W. Hull, M.D., *Chairman* .....20115 Canterbury,  
Detroit 21  
E. B. Cudney, M.D.....Pontiac Motor Div., Pontiac  
H. C. Hansen, M.D.....417 Post Bldg., Battle Creek  
J. R. Heidenreich, M.D.....Daggett  
W. J. Herrington, M.D.....Bad Axe  
W. M. LeFevre, M.D.....289 W. Western Ave., Muskegon  
F. E. Luger, M.D.....303 N. Jefferson Ave., Saginaw  
E. A. Osius, M.D.....901 David Whitney Bldg., Detroit 26  
C. A. Payne, M.D.....1840 Wealthy St. S.E., Grand Rapids  
Ralph W. Shook, M.D.....136 E. Mich. Ave., Kalamazoo  
C. K. Stroup, M.D.....2002 E. Court St., Flint  
R. W. Teed, M.D.....215-A S. Main St., Ann Arbor  
T. J. Trapasso, M.D.....521 Ashmun St., Sault Ste. Marie  
J. M. Wellman, M.D.....301 Seymour Ave., Lansing

## University of Michigan Medical School

### The Department of Postgraduate Medicine

### University Hospital

1957-1958

### Brief Review Courses for Practicing Physicians

Anatomy .....	(Thursdays)	February 18-May 29
Basic Sciences .....		September 29-June 6
Clinical Exercises for Practitioners.....	(Wednesdays)	October 9-March 12
Internal Medicine		
Clinical Internal Medicine.....	(Thursdays)	October 3-March 31
Pulmonary Diseases .....		March 24-28
Metabolism & Endocrinology .....		March 31-April 4
Diseases of Blood and Blood-forming Organs .....		April 7-11
Diseases of the Heart .....		April 14-18
Electrocardiographic Diagnosis .....		April 21-26
Allergy .....		April 28-May 2
Recent Advances in Therapeutics .....		May 5-9
Neurology, Clinical .....		May 7-8
Ophthalmology .....		April 21, 22, and 23
Otolaryngology .....		April 17, 18 and 19
Pediatrics, Obstetrics and Gynecology .....		January 27-31
Radiology, Diagnostic .....		April 7-11
Radio-active Isotopes, Clinical Use of.....		As arranged

Further information and application blanks may be obtained from: John M. Sheldon, M.D., Director, Department of Postgraduate Medicine, 1610 University Hospital, Ann Arbor, Michigan.

# S

The many thousands of patients successfully treated with Signemycin\* over the past year have confirmed the value of this safe and effective antibiotic agent. One further therapeutic resource is thereby provided the practicing physician who is faced daily in office and home practice with immediate diagnosis of common infections and the immediate institution of the most broadly effective therapy at his command, in his continuing task of the ever-extending control over human pathogens.

# IGNE

Now buffered to produce higher, faster blood levels; specify the V form on your prescriptions.

*Supply: SIGNEMYCIN V Capsules, 250 mg. Signemycin Capsules, 250 mg. and 100 mg. Signemycin for Oral Suspension, 1.5 Gm., 125 mg. per 5 cc. teaspoonful, mint flavor. Signemycin Intravenous, 500 mg. vials and 250 mg. vials, buffered with ascorbic acid.*

PFIZER LABORATORIES,  
Division, Chas. Pfizer & Co., Inc.  
Brooklyn 6, N. Y.



World leader in antibiotic development and production

"Eighty-seven patients with various infections of the skin were treated over a period of six weeks with [Signemycin]. Excellent or good results were achieved in sixty-seven, including eleven of twenty-two patients refractory to other antibiotics."

Lewis, H. H.; Frumess, G. M., and Henschel, E. J.: Rocky Mountain M. J. 54:806 (Aug.) 1957.

"Results of treatment with oleandomycin-tetracycline of 50 infections [mostly respiratory] due to resistant organisms and 40 infections [respiratory, skin, urinary infections] due to sensitive organisms are very encouraging. In some of these patients, [Signemycin] was lifesaving, and in others surgery was made unnecessary. This confirms other reports."

Shubin, H.: Antibiotic Med. & Clin. Therapy 4:174 (March) 1957.

Based on case reports documented by independent investigators in 26 countries abroad, the clinical response obtained with Signemycin in 1404 patients with a wide variety of infections was successful in 1329 patients; in 13 cases only was it necessary to discontinue therapy because of side effects.

Report on 1404 Cases Treated with Signemycin: Medical Department,

Pfizer International. Available on request.

In 50 nonselected patients, Signemycin "...appears to be effective in the treatment of most general surgical infections, including virulent staphylococcus aureus infections. In some cases these infections had been clinically resistant to other antibiotics. The drug is apparently well tolerated."

Levi, W. M., and Kredel, F. E.: J. South Carolina M. A. 53:178 (May) 1957.

Of 50 patients with various infectious processes, 26 had not responded to previous antibiotic therapy. With Signemycin "Ninety-six per cent of the mixed infections were clinically controlled. . . and in none of the cases was there any reason to discontinue the drug."

Winton, S. S., and Chesrow, E.: Antibiotics Annual 1956-1957, New York, Medical Encyclopedia, Inc., 1957, p. 55.

Signemycin in 79 patients with severe soft tissue infections: "The average response of these cases was excellent and inflammatory symptoms subsided with almost uniform rapidity....The magnitude and incidence of surgical intervention was reduced....Side reactions were minimal. . . ."

LaCaille, R. A., and Prigot, A.: Antibiotics Annual 1956-1957, New York, Medical Encyclopedia, Inc., 1957, p. 67.

Five groups of patients (total 211) with acne were treated with one of five antibiotic agents, including Signemycin (55 cases). "The results were evaluated taking into consideration the usual response to such conservative conventional therapy and the rapidity of response." In 8 weeks, Signemycin rapidly attained and maintained the highest percentage of efficacy of antibiotic agents tried.

Frank, L., and Stritzler, C.: Antibiotic Med. & Clin. Therapy 4:419 (July) 1957.

In the treatment of 78 patients with tropical infections, some complicated by multiple bacterial contamination or present for years, Signemycin was found to be "...an exceptionally effective agent," requiring smaller doses and less extended periods of therapy than with the tetracyclines alone, and "caused no notable toxic reactions."

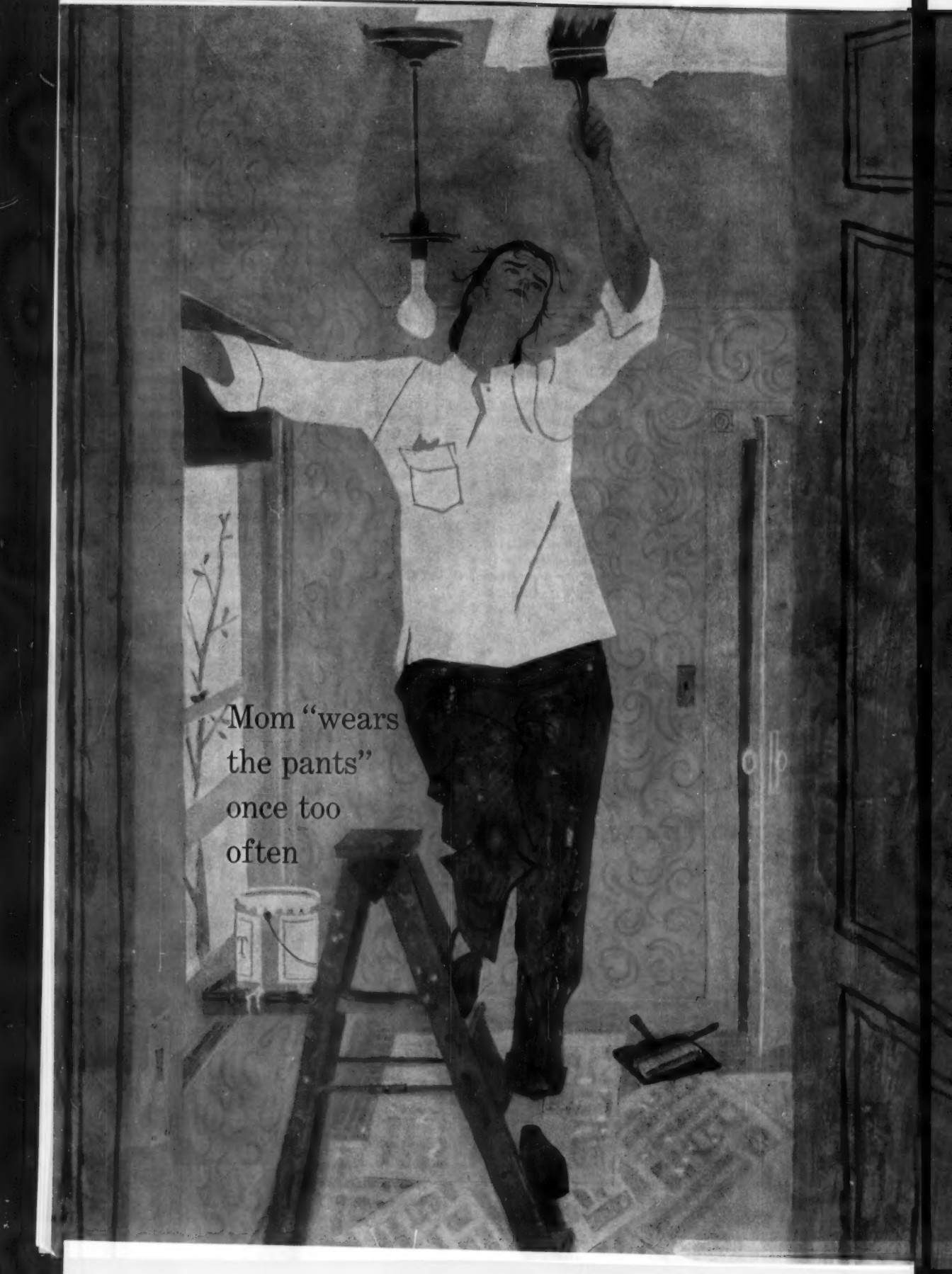
Loughlin, E. H., and Mullin, W. G.: Antibiotics Annual 1956-1957, New York, Medical Encyclopedia, Inc., 1957, p. 63.

# EMMYCIN<sup>†</sup> V

OLEANDOMYCIN TETRACYCLINE-PHOSPHATE BUFFERED

PROVED CLINICALLY EFFECTIVE

When specifying  
buffered Signemycin V  
be sure to write the  
V on your Rx



Mom "wears  
the pants"  
once too  
often

# frozen shoulder

Bursitis and tenosynovitis are new terms to homemakers, but they are not uncommon sequels to overexertion. Early antirheumatic therapy is to be encouraged in the treatment of these conditions, as it is in more serious rheumatic conditions, to alleviate pain and prevent progression of the disorder. With adequate therapy the prognosis of bursitis in its acute stage is good. Delaying therapy may result in extension of the inflammation and gross anatomical changes that tend to incapacitate the patient.

SIGMAGEN provides doubly protective corticoid-salicylate therapy—a combination of METICORTEN® (prednisone) and acetylsalicylic acid providing additive antirheumatic benefits as well as rapid analgesic effect. These benefits are supported by aluminum hydroxide to counteract excess gastric acidity and by ascorbic acid, the vitamin closely linked to adrenocortical function, to help meet the increased need for this vitamin during stress situations.

protective corticoid-salicylate therapy

## SIGMAGEN<sup>®</sup>

corticoid-analgesic compound    Tablets

*for patients  
who go beyond  
their physical  
capacity*

*Schering*

# SELECTION OF SUITABLE SULFONAMIDE IS OF PRIME IMPORTANCE IN LONG-TERM THERAPY OF URINARY TRACT INFECTIONS

## Drug Must Meet High Standards of Efficacy and Safety

In recent years sulfonamide therapy for urinary tract infections has gained new popularity because the original drugs have been replaced by more soluble, less toxic and more effective sulfas.<sup>1</sup> Gram for gram, a single sulfonamide featuring high solubility and low acetylation is unsurpassed for efficacy and safety — especially in prolonged therapy.

An editorial in the *Journal of the American Medical Association* states that sulfonamides are successful in 90 per cent of urinary tract infections, and "... should be tried first."<sup>2</sup> There are many properties a sulfonamide should possess before it can be claimed to be efficacious and safe. "Thiosulfil,"<sup>3</sup> brand of sulfamethizole, is considered to be one of the "... most acceptable sulfonamides for treatment of urinary tract infections ..."<sup>3</sup>

### Broad Bacteriostatic Index

"Thiosulfil" is effective against most gram negative and gram positive organisms commonly found in the urinary channels.

### High Plasma — Urine Levels

"Thiosulfil" is rapidly absorbed and excreted, achieving high antibacterial levels in the urine and throughout infected tissue, with negligible penetration into red blood cells.

### High Solubility

"Thiosulfil," in both the active and acetylated forms, is highly soluble in urine over a wide pH range, thus permitting effective action with minimal side effects. Alkalini-

zation is not required; fluids may be restricted rather than forced.

### Low Acetylation

"Thiosulfil" is virtually unacetylated. As much as 90-95 per cent remains in the free therapeutically active form. Virtually all of a given dose is therefore available for antibacterial action.

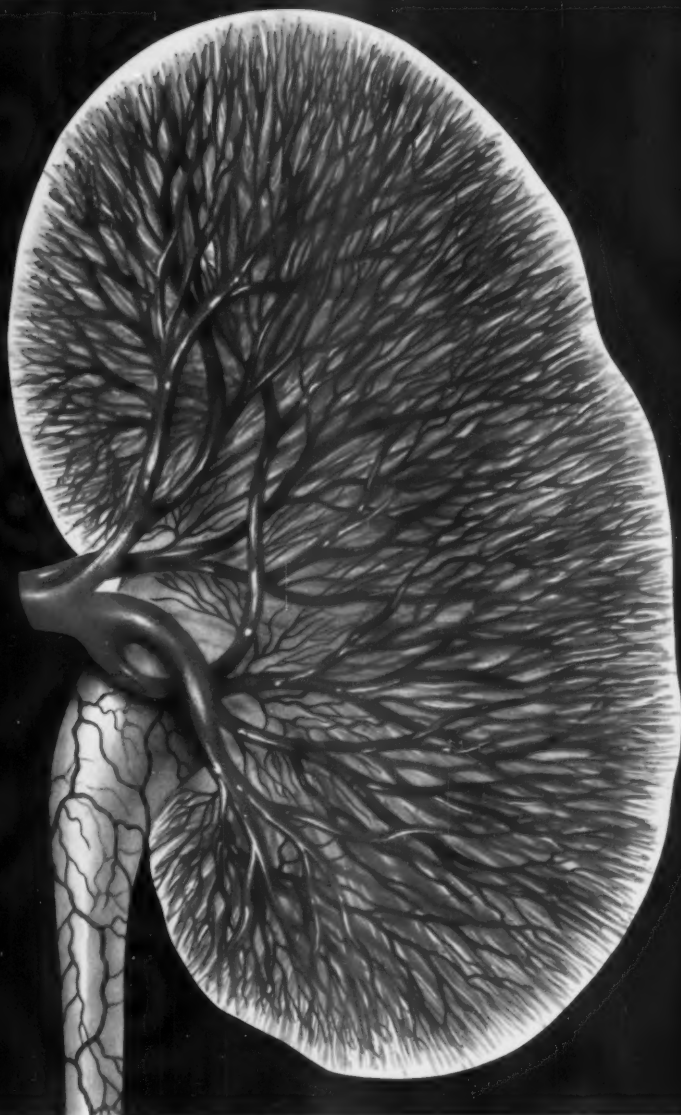
In a long-term clinical study, patients with incurable chronic urinary infections were kept symptom free for as long as five or six years on a maintenance dose of one or two tablets of "Thiosulfil" daily.<sup>4</sup> In another evaluation, 20 patients were given 25-100 grams of "Thiosulfil" over a period of 20-90 days without incidence of side reactions.<sup>5</sup> Goodhope<sup>6</sup> reports that during 30 months of clinical use with "Thiosulfil," no evidence occurred of exanthemata, urticaria, emesis, fever, hematuria and crystalluria.

*Recommended Dosages:* 0.5 Gm. four times daily. The pediatric dosage is 30 to 45 mg. daily per pound of body weight. If voiding occurs during the night, an extra half-dose should be given. Fluids may be restricted rather than forced.

*Availability:* Tablets, 0.25 Gm. (bottles of 100 and 1,000). Suspension, 0.25 Gm. per 5 cc. (bottles of 4 and 16 fl. oz.).

Bibliography on request.

AYERST LABORATORIES  
New York, N. Y. • Montreal, Canada



Corrosion preparation showing complex arterial network of the kidney.

*direct/effective*

**"THIOSULFIL"®**

(Brand of sulfamethizole)

*Single sulfonamide features efficacy and safety in long-term therapy of urinary tract infections.* The exceptionally high solubility of "Thiosulfil," complete absorption, minimal acetylation, and negligible penetration into red blood cells insure rapid and effective bacteriostatic activity at the site of infection with virtually no side effects.

Ayerst Laboratories • New York, N. Y. • Montreal, Canada

# "MYSOLINE"®

Brand of Primidone

## in epilepsy



without  
the  
shadow  
of  
doubt

Three years of successful clinical use in the United States without any reported irreversible toxic effect confirms the safety and effectiveness of "Mysoline" in controlling grand mal and psychomotor attacks. "Mysoline" in epilepsy has world wide acceptance.

Supplied: 0.25 Gm. scored tablets, bottles of 100 and 1,000.



AYERST LABORATORIES • NEW YORK, N. Y. • MONTREAL, CANADA

"Mysoline" is available in the United States by arrangement with Imperial Chemical Industries Ltd.



**NOW—AGAINST THE ENTIRE COLD SYNDROME**

STUFFINESS

ACHES

RHINORRHEA

FEVER

MALaise

**ONE FORMULA**

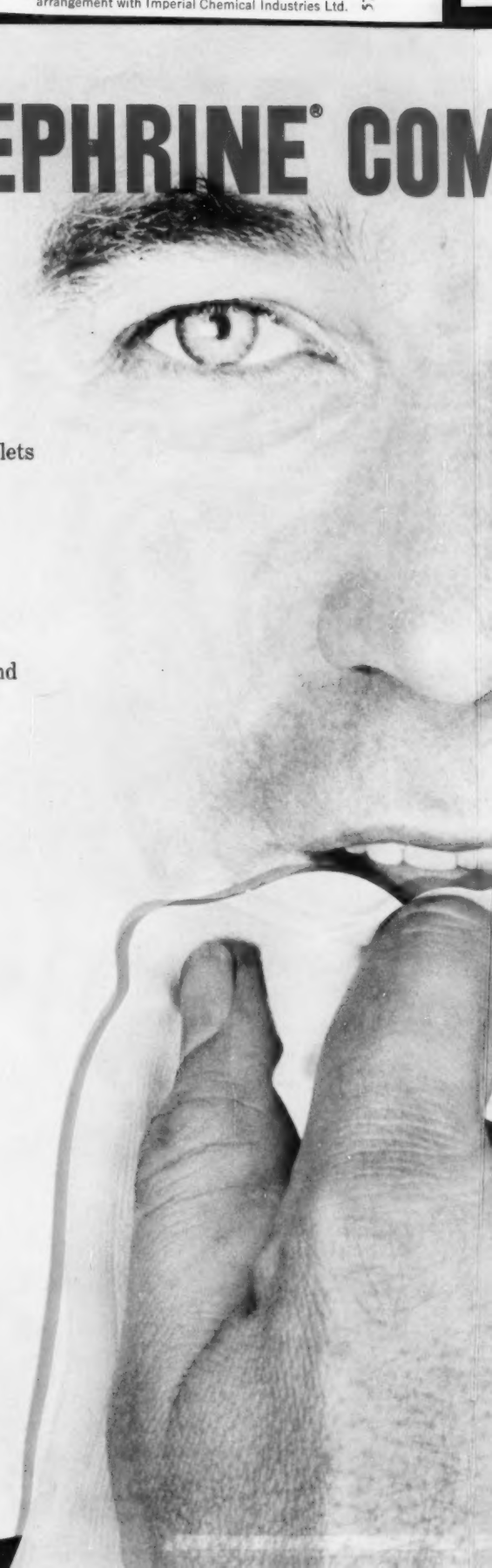
# **NEW** **NEO-SYNEPHRINE® COM**

## **CONTROL OF COMMON COLD SYMPTOMS** with


Neo-Synephrine Compound Cold Tablets  
is pharmacologically comprehensive  
and clinically practical...

**COMPREHENSIVE** because this new  
preparation rationally  
combines drug actions needed  
to control common cold  
symptomatology "across the board"; and

**PRACTICAL** because the average  
patient will promptly find  
relief from his distress.



# COMPOUND COLD TABLETS



For full-range symptomatic relief orally each tablet of Neo-Synephrine Compound provides:


*vs. Nasal Stuffiness, Tightness—*  
Neo-Synephrine  
hydrochloride...5 mg.  
pre-eminent orally  
effective decongestant


*vs. Aches, Chills, Fever—*  
Acetaminophen (N-acetyl-p-aminophenol)...150 mg.  
modern analgesic and  
antipyretic


*vs. Rhinorrhea—*  
Thenfadir® hydrochloride  
...7.5 mg.  
effective, well-tolerated  
antihistaminic

*vs. Lassitude, Malaise—*  
Caffeine...15 mg.  
dependable, mild, stimulating  
agent

DOSAGE:

 Adults—2 tablets three times a day

  
*Children 6 to 12 years—*  
1 tablet three times a day

 Bottles of 100 tablets

**NEW**

# **NEO-SYNEPHRINE® COM**

## **CONTROL OF COMMON COLD SYMPTOMS** with

Neo-Synephrine Compound Cold Tablets  
is pharmacologically comprehensive  
and clinically practical...

**COMPREHENSIVE** because this new  
preparation rationally  
combines drug actions needed  
to control common cold  
symptomatology "across the board"; and

**PRACTICAL** because the average  
patient will promptly find  
relief from his distress.



# COMPOUND COLD TABLETS

For full-range symptomatic relief orally each tablet of Neo-Synephrine Compound provides:


*vs. Nasal Stuffiness, Tightness—*  
Neo-Synephrine hydrochloride...5 mg.  
pre-eminent orally effective decongestant


*vs. Aches, Chills, Fever—*  
Acetaminophen (N-acetyl-p-aminophenol)...150 mg.  
modern analgesic and antipyretic


*vs. Rhinorrhea—*  
Thenfadir® hydrochloride ...7.5 mg.  
effective, well-tolerated antihistaminic

*vs. Lassitude, Malaise—*  
Caffeine...15 mg.  
dependable, mild, stimulating agent

DOSAGE:

 *Adults—2 tablets three times a day*

  
*Children 6 to 12 years—*  
1 tablet three times a day

  
Bottles of 100 tablets

# TO CLEAR THE AIRWAY

topically  
in colds,  
sinusitis  
and allergic  
rhinitis

## NTZ<sup>®</sup> Nasal Spray

*quick  
and  
lasting  
decongestion*



Combining three effective intranasal medications, NTZ produces sustained decongestion...aeration...sinus drainage. There are virtually no side effects; and NTZ maintains therapeutic action throughout repeated use. The NTZ squeeze bottle is convenient and simplifies adherence to prescribed procedure.

**Neo-Synephrine<sup>®</sup> hydrochloride, 0.5%**—accepted vasoconstrictor and decongestant

**Thenfadil<sup>®</sup> hydrochloride, 0.1%**—dependable topical antihistaminic

**Zephiran<sup>®</sup> chloride, 1:5000**—antibacterial wetting agent and preservative

*Winthrop* LABORATORIES New York 18, N.Y.

NTZ, Neo-Synephrine (brand of phenylephrine), Thenfadil (brand of phenylamine) and Zephiran (brand of benzalkonium, as chloride, refined), trademarks reg. U.S. Pat. Off.

dial-the-part operation

prestige "look"

prestige name

moderate price

or rental if you like

one of the  
soundest  
general utility  
x-ray investments  
you can make



**anatomic**

**Century II**  
diagnostic x-ray table



get the story from your Picker representative. You'll find him under "Picker X-Ray" in the classified section of your local 'phone book: or write us at 25 So. Broadway, White Plains, N. Y.

**DETROIT 21, MICH.,** 8514 W. McNichols Road  
Battle Creek, Mich., 231 Eldred Street  
Grand Rapids 8, Mich., 48 Honeoye S.W.

Pontiac, Mich., 1415 Oakwood Drive  
Flint, Mich., 4734 Canterbury Lane

# NOW, FROM ROBINS, A NEW AND UNEXCELLED ANTIHISTAMINE



**why Dimetane is the best reason yet for you to re-examine the antihistamine you're now using » Milligram for milligram, DIMETANE potency is unexcelled.** DIMETANE has a therapeutic index unrivaled by any other antihistamine—a relative safety unexceeded by any other antihistamine. DIMETANE, even in very low dosage, has been effective when other antihistamines have failed. Drowsiness, other side effects have been at the very minimum.

## » unexcelled antihistaminic action

Diagnosis	No. of Patients	Response				Side Effects
		Excellent	Good	Fair	Negative	
Allergic rhinitis and vasomotor rhinitis	30	14	9	5	2	Slight Drowsiness (3)
Urticaria and angioneurotic edema	3	1	1	1		Dizzy (1)
Allergic dermatitis	2		1	1		Slight Drowsiness (2)
Bronchial asthma	1		1			
Pruritus	1		1			
Total	37	15	13	7	2	Drowsiness (5) 16.2% Dizzy (1)

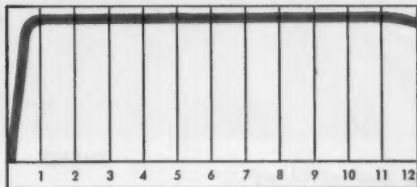
From the preliminary Dimetane Extentabs studies of three investigators. Further clinical investigations will be reported as completed.



DIMETANE® EXTENTABS® TABLETS ELIXIR

DIMETANE IS PARABROMDYLANINE MALEATE - EXTENTABS 12 MG., TABLETS 4 MG., ELIXIR 2 MG. PER 5 CC.

**a blanket of allergic protection, covering 10-12 hours — with just one Dimetane Extentab** » **DIMETANE Extentabs protect patient for 10-12 hours on one tablet.**



Periods of stress can be easily handled with supplementary DIMETANE Tablets or Elixir to obtain maximum coverage.

#### Dosage:

**Adults**—One or two 4-mg. tabs.  
or two to four teaspoonfuls  
Elixir, three or four times daily.  
One Extentab q. 8-12 h.  
or twice daily.  
**Children over 6**—One tab.  
or two teaspoonfuls Elixir t.i.d.  
or q.i.d., or one Extentab q. 12h.  
**Children 3-6**—½ tab.  
or one teaspoonful Elixir t.i.d.

**A. H. ROBINS CO., INC.**

Richmond, Virginia | Ethical Pharmaceuticals of Merit Since 1878



"the value of analgesic and tranquilizing agents  
should be clearly recognized in the management of [angina]..."<sup>1</sup>

*new for angina*



# CARTRAX\*

**links freedom from anginal attacks with a shelter of tranquility**

In pain. Anxious. Fearful. On the road to cardiac invalidism. These are the pathways of angina patients. For fear and pain are inextricably linked in the angina syndrome.

For angina patients—perhaps the next one who enters your office—won't you consider new CARTRAX? This doubly effective therapy combines PETN (pentaerythritol tetranitrate) for lasting vasodilation and ATARAX for peace of mind. Thus CARTRAX relieves not only the anginal pain but reduces the concomitant anxiety.

*Dosage and supplied:* begin with 1 to 2 yellow tablets (10 mg. PETN plus 10 mg. ATARAX) 3 to 4 times daily. This may be increased for maximal effect by switching to pink tablets (20 mg. PETN plus 10 mg. ATARAX). In bottles of 100.

CARTRAX should be taken *before* meals, on a *continuous* dosage schedule. Use with caution in glaucoma.

1. Russek, H. L.: J. Am. Geriatr. Soc. 4:877 (Sept.) 1956.

\*Trademark



New York 17, New York

**disappointed with half measures in angina?**

← READ THIS

# You and Your Business

## RECOMMENDATIONS AND BACKGROUND OF INFLUENZA—1957

*Adopted by the Michigan Department of Health, September 9, 1957.*

*Approved by the MSMS Committee on National Defense, September 18, 1957.*

*Approved by the MSMS Council, September 27, 1957.*

Strains of a new family of Type A influenza viruses have caused extensive outbreaks of a mild type of influenza throughout the world. There is a possibility of an outbreak of this disease this fall or early winter involving ten to twenty per cent of Michigan people during a period of from four to six weeks. A vaccine has been developed for use against the new influenza family.

### Recommendations for the Guidance of Physicians and Health Officers

**Use of Vaccine.**—The new influenza vaccine should be used as rapidly as it becomes available. To be effective, it must be given at least 10-14 days before exposure. There are no immunological dangers in giving the new influenza vaccine concurrently with other immunizing agents. But the vaccine should not be given concurrently in those instances where the other immunizing agents are likely to cause reactions.

**Priorities.**—With an anticipated shortage of vaccine and the possibility of a high attack rate, four groups, in the following order, should be given priority for immunization:

- (a) Those whose services are necessary for the health of the community;
- (b) Those who provide other basic community services;
- (c) Those who in the opinion of their private physicians constitute a special medical risk;
- (d) Those who are housed together in concentrated groups.

**Dosage.**—Vaccine dosage should be as follows:  
3 months—5 years—Two doses of 1/10 cc. intradermally given one to two weeks apart  
6 years—12 years—Two doses of 1/2 cc. subcutaneously given two weeks apart  
13 years and over—One dose of one cc subcutaneously

**Diagnosis.**—With clinical diagnosis based on the judgment of the individual physician, the following points and procedures should be observed:

- (a) A reasonable number of laboratory specimens from any outbreak should be submitted for viral studies to establish the specific etiology. Specimens for viral studies from an outbreak will be accepted by the state health department only upon recommendation of the local health officer and only within the capacity of the laboratory.

Twelve specimens should be sufficient for the community purpose involved. Laboratory viral studies are not of practical value in managing individual cases since the overwhelming majority of patients recover before such studies are completed.

- (b) Bacteriological studies should be made on patients when there is suspicion of bacterial complications.

**Home Care.**—The vast majority of influenza patients should be treated at home. Hospital care should be considered only for complicated cases and for others who in the opinion of their physician constitute a special medical risk.

**Community Action.**—For the present, at least, the risk of the new type of influenza is not sufficient to justify either delaying the opening of schools, the closing of schools once opened or interfering with public gatherings.

**Public Understanding.**—Local health departments are designated as sources for information about influenza, and the state health department will request physicians' organizations to make specific recommendations to their membership and patients concerning the management of influenza cases.

**Surveillance.**—The following procedures will be observed in the surveillance of the disease in Michigan:

- (a) All clinically-diagnosed cases of influenza-like disease will be reported.
- (b) Local health officers will supplement the regular reporting from physicians carried out under the law by (1) spot-checking by telephone with local physicians (or representative sampling) as to the number of patients with influenza seen by them during the past week; (2) spot-checking by telephone with representative schools and/or industries regarding excessive absenteeism.
- (c) The State Health Department will require no data from local health departments other than the number of diagnosed cases.
- (d) Each week, the State Health Department will spot-check a sample of the hospitals in the state as to the number of cases of and deaths from pneumonia.

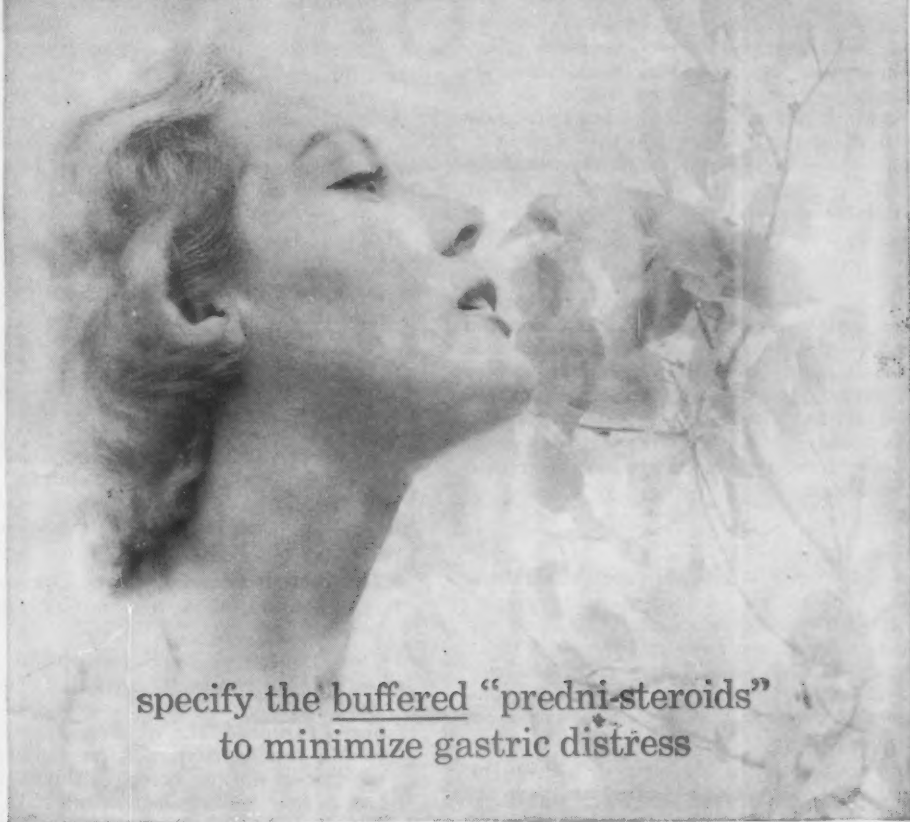
### Background

#### About the Vaccine.

**Distribution.**—In an effort to secure equitable distribution of the vaccine within the state, manufacturers of the vaccine have been requested to allot Michigan's share of their production of the new vaccine to their "detail men" in proportion to the population served by them.

*(Continued on Page 1364)*

in bronchial asthma and respiratory allergies



specify the buffered "predni-steroids"  
to minimize gastric distress

combined steroid-antacid therapy...

'Co-Deltra' or 'Co-Hydeltra' provides all the benefits of "predni-steroid" therapy and minimizes the likelihood of gastric distress which might otherwise impede therapy. They provide easier breathing—and smoother control—in bronchial asthma or stubborn respiratory allergies.

**SUPPLIED:** Multiple Compressed Tablets 'Co-Deltra' or 'Co-Hydeltra' in bottles of 30, 100, and 500.

'CO-DELTRA' and 'CO-HYDELTRA' are registered trademarks of MERCK & CO., INC.

Multiple  
Compressed  
Tablets



2.5 mg. or 5.0 mg.  
of prednisone or  
prednisolone, plus  
300 mg. of dried  
aluminum  
hydroxide  
gel and 50 mg.  
of magnesium  
trisilicate.

**Co-Deltra<sup>®</sup>**  
(Prednisone buffered)

**Co-Hydeltra<sup>®</sup>**  
(Prednisolone buffered)



**MERCK SHARP & DOHME**  
DIVISION OF MERCK & CO., INC.  
PHILADELPHIA 1, PA.

## RECOMMENDATIONS AND BACKGROUND OF INFLUENZA—1957

(Continued from Page 1362)

**Potency and Dosage.**—The strength of the monovalent vaccine now being produced is 200 CCA units per 1 cc. dose. Recommendations are based upon providing the widest possible use of a vaccine which can be made available commercially in the shortest period of time. As the vaccine supply becomes more plentiful, it is expected that either the potency of the vaccine or the dosage will be increased, and that the vaccine may be modified to protect against other influenza viruses.

**Reactions.**—Use of the new vaccine is expected to cause some soreness at the site of injection and about the same percentage of other reactions as are caused by the polyvalent forms of vaccine which have been available commercially over a number of years. Reactions are most frequent in younger children, while less than one per cent of adults immunized are expected to have more than local tenderness.

### About the Disease

**Characteristics.**—The newer form of influenza resembles the clinical picture of mild influenza occurring during the past ten years. It in no way resembles the influenza experienced in 1918. Even in countries with considerable poverty and congested, overcrowded populations, deaths from complications of influenza have not exceeded one per two thousand cases.

The development of influenza in a given individual is thought to be dependent upon the relative dose of the virus received and the patient's antibody levels and general health.

The virulence of influenza viruses has not been observed to change during any outbreaks in the twenty-four years that they have been identified. There is no reason to believe that the situation will be any different this year.

**Outbreaks.**—In Australia, where this type of influenza has been occurring this spring and summer (their winter months), the disease has continued to be relatively mild. There were few bacterial complications and there was no serious disruption of community living. The attack rate in Australia was about 15 per cent of the population in those areas where the disease assumed epidemic proportion. This incidence occurred in a four to six weeks period.

Observation of influenza outbreaks in other parts of the world has again proven that the maintenance of good nutrition and good health habits are effective in preventing complications.

## HIGHLIGHTS OF SEPTEMBER SESSION OF THE COUNCIL

September 22-27, 1957

A total of ninety-three items was presented and discussed by the twenty-five members of The Council (eighteen Councilors, The President, President-Elect, Immediate Past President, Secretary, Treasurer, Speaker and Vice Speaker) at the two meetings held coincident with the MSMS Annual Session in Grand Rapids.

Three hundred thirty-one cumulative hours were contributed on these two days by the members of The Council in their study of and decisions on the problems facing the medical profession of Michigan, including:

### ● Reorganization of The Council:

D. Bruce Wiley, M.D., Utica, was re-elected as Chairman.

W. B. Harm, M.D., Detroit, was again chosen as Vice Chairman.

Wm. M. LeFevre, M.D., Muskegon, was selected as Chairman of the County Society's Committee to succeed himself.

Ralph W. Shook, M.D., Kalamazoo, was re-elected head of the Finance Committee.

B. M. Harris, M.D., Ypsilanti, was elected to the post of Chairman of the Publication Committee.

● The Monthly financial reports were studied and approved, as well as bills payable which were ordered paid.

● The Market Opinion Survey Report was presented, in its entirety, and referred to the House of Delegates. A vote of thanks was extended to Survey Director H. W. Brennehan and the MSMS headquarters staff, for services beyond the line of duty to complete this monumental task in four and one-half months. The Survey Report, including action taken on same by the 1957 House of Delegates, was ordered transmitted to Michigan Medical Service.

● Group Life Insurance for MSMS Members. Report on a survey made by a leading insurance consultant indicated a high percentage of MSMS members are interested in this coverage; favorable consideration was recommended to the House of Delegates.

● The Annual Report of the Healing Arts Study Committee was approved and referred to the House of Delegates as a part of the Supplemental Report of The Council.

● An instance of the practice of medicine by a corporation was thoroughly discussed by The Council; the Chairman was authorized to appoint a committee for Liaison with hospital administration, The Council hoping for beneficial results through mutual understanding rather than from litigation.

(Continued on Page 1366)

Relieve moderate or severe pain

Reduce fever

Alleviate the general malaise of  
upper respiratory infections

'TABLOID'

**'EMPIRIN'<sup>®</sup>**  
**COMPOUND<sup>®</sup>**  
**WITH**  
**CODEINE**  
**PHOSPHATE<sup>\*</sup>**

maximum codeine analgesia/optimum antipyretic action

\*Subject to Federal Narcotic Regulations



BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, New York

**Symbols  
OF  
PROVEN  
PAIN  
RELIEF**



**gr. 1**



**gr. ½**



**gr. ¼**



**gr. ⅛**

# Formulas for dependable relief...

...from moderate to severe pain complicated by tension, anxiety and restlessness.

## 'CODEMPIRAL'® NO. 3\*



Codeine Phosphate	gr. ¼
Phenobarbital	gr. ¼
Acetophenetidin	gr. 2½
Aspirin (Acetylsalicylic Acid)	gr. 3½

## 'CODEMPIRAL'® NO. 2\*



Codeine Phosphate	gr. ¼
Phenobarbital	gr. ¼
Acetophenetidin	gr. 2½
Aspirin (Acetylsalicylic Acid)	gr. 3½

...from pain of muscle and joint origin, simple headache, neuralgia, and the symptoms of the common cold.

'TABLOID'

## 'EMPIRIN' COMPOUND®



Acetophenetidin	gr. 2½
Aspirin (Acetylsalicylic Acid)	gr. 3½
Caffeine	gr. ½

...from mild pain complicated by tension and restlessness.

## 'EMPIRAL'®



Phenobarbital	gr. ¼
Acetophenetidin	gr. 2½
Aspirin (Acetylsalicylic Acid)	gr. 3½

\*Subject to Federal Narcotic Regulations



BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, New York

# why wine in digestive disorders?



Although the effects of wine on the digestive system have been discussed for centuries, it has been only in recent years that many of its physiological attributes have been determined.

**WINE AND THE SALIVARY GLANDS**—The increase in salivary flow following a moderate intake of wine is apparent almost immediately,<sup>1</sup> such increase being attributed to direct sensitization of secretory nerve endings.<sup>2</sup>

**WINE AND GASTRIC SECRETION**—With a pH averaging 3.2, wine resembles gastric juice more closely than does any other natural beverage. Its tannins, organic acids and salts of these acids serve as buffering agents to maintain this pH. Relatively low in content of alcohol, table wine has been found to stimulate gastric secretion and induce production of gastric juice high in hydrochloric acid, sodium chloride, rennin and pepsin.<sup>3</sup>

**WINE AND THE DIGESTIVE TRACT**—With its low concentration of alcohol, wine in moderate consumption has been found to induce a marked increase in biliary flow.<sup>4</sup> This, together with increased function of pancreatic enzymes, may thus encourage better digestion of fatty foods.

**THEREFORE—IN THE TREATMENT OF DIGESTIVE DISORDERS**—Wine is being widely recommended in the treatment of anorexia, hypochlorhydria without gastritis, mucous colitis, spastic constipation and diarrhea, and in digestive disorders stemming from emotional tension and anxiety.

These and other modern *R* uses for wine are discussed in the brochure "Uses of Wine in Medical Practice." For your free copy write—Wine Advisory Board, 717 Market Street, San Francisco 3, California.

1. Winsor, A. L. and Strongin, E. I.: *J. Exper. Psychol.* 16:589 (1933).
2. Beazell, J. M., and Ivy, A. C.: *Quart. J. Studies on Alc.* 1:45 (1940).
3. Faroy, G., and Weissenbach, R. J.: *Hôpital* 25:306 (1937).
4. Okada, S.: *J. Physiol.* 49:457 (1915).

# HIGHLIGHTS OF THE COUNCIL

(Continued from Page 1364)

- **The fee-schedule of the Michigan Society of Internal Medicine** was received for reference to any committee studying fees.
- **Appointments.** Wilfrid Haughey, M.D., was authorized to attend meeting of the Committee

Umphrey, M.D., Detroit, and Lester P. Dodd, Detroit.

- **C. E. Umphrey, M.D.,** Detroit, Michigan, Chairman for the American Medical Education Foundation presented his final report, and recommendations for the future—during which he praised the Woman's Auxiliary for its tremendous job in furthering AMEF in this State.
- **The Beaumont Memorial Foundation,** as au-



MEMBERS OF THE COUNCIL, 1957-1958

*Seated (left to right):* L. Fernald Foster, M.D., Detroit; G. W. Slagle, M.D., Battle Creek; D. Bruce Wiley, M.D., Utica; G. B. Saltonstall, M.D., Charlevoix; and W. A. Hyland, M.D., Grand Rapids.

*Middle row (left to right):* H. H. Hiscock, M.D., Flint; J. J. Lightbody, M.D., Detroit; Ralph W. Shook, M.D., Kalamazoo; K. H. Johnson, M.D., Lansing; W. M. LeFevre, M.D., Muskegon; Editor Wilfrid Haughey, M.D., Battle Creek; E. S. Oldham, M.D., Breckenridge; William Bromme, M.D., Detroit; and B. M. Harris, M.D., Ypsilanti.

*Top row (left to right):* O. J. Johnson, M.D., Bay City; G. Thomas McKean, M.D., Detroit; D. G. Pike, M.D., Traverse City; O. B. McGillicuddy, M.D., Lansing; Arch Walls, M.D., Detroit; J. F. Beer, M.D., St. Clair; C. Allen Payne, M.D., Grand Rapids; H. J. Meier, M.D., Coldwater; and T. P. Wickliffe, M.D., Calumet.

*Absent on Society business:* W. B. Harm, M.D., Detroit; B. T. Montgomery, M.D., Sault Ste. Marie; and A. E. Schiller, M.D., Detroit.

on Indigent Care of the AMA Council on Medical Service, Chicago; Legal Counsel Dodd was authorized to represent MSMS at workman's compensation section of the State Bar of Michigan convention, Detroit.

- **MSMS co-sponsorship** of 1958 Michigan Rural Health Conference, Ann Arbor, January 22-24, 1958, was authorized.
- **Report and statistics** on the MSMS Health and Accident Insurance program, provided by the carrier (Provident Life and Accident Insurance Company, of Chattanooga) were presented and given study—and included in the Supplemental Report of The Council.
- **Committee to Review the Problem of Professional Liability** was appointed by Chairman D. Bruce Wiley, M.D., as follows: S. W. Donaldson, M.D., Ann Arbor, Chairman, C. E.

thorized by the 1956 House of Delegates, was created coincident with the 1957 MSMS convention—on September 25, 1957, with the following acting as incorporators and members of its Board of Trustees: Otto O. Beck, M.D.; W. S. Jones, M.D.; C. T. Eklund, M.D.; J. H. Fyvie, M.D.; L. J. Hirschman, M.D.; W. M. LeFevre, M.D.; A. H. Whittaker, M.D.; G. B. Saltonstall, M.D.; D. Bruce Wiley, M.D. Elected officers were: President, Otto O. Beck, M.D.; Vice President, W. M. LeFevre, M.D.; Secretary-Treasurer, Wm. J. Burns, LL.B. Life membership is \$100.00, and sustaining membership, \$5.00 per year. Doctor LeFevre became the first paid sustaining member.

- **The Koppasch Case.** Legal Counsel Dodd reported that the Michigan State Medical Society

(Continued on Page 1368)

for certain disorders of menstruation and pregnancy

TRULY EFFECTIVE PROGESTATIONAL THERAPY

BY MOUTH

# NORLUTIN

(norethindrone, Parke-Davis)

**oral progestogen**  
**with**  
**unexcelled potency**  
**and**  
**unsurpassed efficacy**

Now, with small oral doses of this new and distinctive progestogen, you can produce the clinical effects of injected progesterone. In amenorrheic women for example, "As little as 50 mg. of [NORLUTIN] administered in divided doses over a five-day period was sufficient to induce withdrawal bleeding."<sup>1</sup>

#### CASE SUMMARY<sup>2</sup>

Amenorrhea of 4 years' duration in a 24-year-old married woman. A course of 10 mg. NORLUTIN twice daily for 5 days was followed after 3 days by menses lasting about 5 days. Since no spontaneous menstruation occurred during the following 35 days, she was given another course of treatment with NORLUTIN, 10 mg. twice daily for 5 days. This was followed by menses.

When this patient was given ethisterone, 40 mg. twice daily for 5 days, no bleeding had ensued when she was seen 41 days later.

**INDICATIONS FOR NORLUTIN:** conditions involving deficiency of progestogen such as primary and secondary amenorrhea, menstrual irregularity, functional uterine bleeding, endocrine infertility, habitual abortion, threatened abortion, premenstrual tension, and dysmenorrhea.

**PACKAGING:** 5-mg. scored tablets (C. T. No. 882), bottles of 30.

**REFERENCES:** (1) Greenblatt, R. B.: *J. Clin. Endocrinol.* 16:869, 1956. (2) Hertz, R.; Waite, J. H., & Thomas, L. B.: *Proc. Soc. Exper. Biol. & Med.* 91:418, 1956.



**PARKE, DAVIS & COMPANY**  
**DETROIT 32, MICHIGAN**

50191

## HIGHLIGHTS OF THE COUNCIL

(Continued from Page 1366)

had been stipulated out of the Kopprasch case from any damage; only the conspiracy charges against the county medical society and the hospital remain. Trial is set in Allegan for October 8-9-10.

- **"Big Look."** Chairman W. S. Jones reported that the Big Look Committee had inspected property in Lansing as site for the future MSMS headquarters, but desired additional time for further investigation. The Council instructed the Big Look Committee to seek the services of an architect at the earliest possible date.
- **Committee Reports.** Rheumatic Fever Control Committee, meeting of September 11; Permanent Conference Committee, September 11; Committee on Michigan Medical Service, September 11 (the report of this committee as amended was referred to the 1957 House of Delegates); Committee on National Defense, September 18.
- **Supplemental Report of The Council** was given minute study, amended in several paragraphs, approved and referred to the House of Delegates.
- **Newly elected Councilors** were introduced at the Friday morning (September 27) meeting; 7th District, J. F. Beer, M.D., St. Clair; 8th District, E. S. Oldham, M.D., Breckenridge; 9th District, D. G. Pike, M.D., Traverse City; 10th District, O. J. Johnson, M.D., Bay City.
- **Matters of mutual interest** were discussed with A. E. Heustis, M.D., Michigan Health Commissioner.
- **Official thanks** to all who helped with the 1957 Annual Session were placed on The Council's minutes; a special vote of thanks was issued to Past President Jones and to retiring councilors L. C. Harvie, M.D., Saginaw; W. S. Stinson, M.D., Bay City; and H. B. Zemmer, M.D., Lapeer.
- **Individual reports** on the condition of the profession in each Councilor District were given by the Councilors.

## MSMS MARKET OPINION SURVEY

The Opinion Survey of Prepaid Medical Care Coverage in Michigan, prepared by the Michigan State Medical Society and presented to its House of Delegates in Grand Rapids on September 23-24, attracted wide attention throughout the United States—even the *New York Times* devoting a column to the report.

The final report of this survey and the action taken on it by the 1957 House of Delegates are included in this number of *THE JOURNAL*.

## "YESTERDAY'S HOPELESS"



DR. BRUSH

Brock E. Brush, M.D., Detroit, Chairman of the Program Committee for the 1958 Michigan Clinical Institute, announces that some thirty-five eminent clinicians and teachers will be guest essayists on a program aimed at presenting practical solutions in everyday clinical medicine.

"The MCI program next year will stress modern diagnosis and treatment of practical value in everyday practice" states Dr. Brush. "The whole meeting will present new procedures, drugs and instruments which will help doctors of medicine transform yesterday's hopeless—the critically sick and chronically ill—into healthy, productive and independent individuals."

Some of the speakers at the MCI, scheduled for the Sheraton-Cadillac Hotel, Detroit, March 12-13-14, 1958, are:

Henry T. Bahnson, M.D., Baltimore, Md.  
 Laurence W. Kinsell, M.D., Oakland, Calif.  
 Alexander T. Aitken, M.D., Brookline, Mass.  
 Preston A. Wade, M.D., New York, N. Y.  
 Edgar V. Allen, M.D., Rochester, Minn.  
 Charles H. Rammelkamp, M.D., Cleveland, O.  
 Isidore Snapper, M.D., New York, N. Y.  
 John Parks, M.D., Washington, D. C.  
 Clement A. Smith, M.D., Boston, Mass.  
 William M. Wallace, M.D., Cleveland, O.  
 H. D. Fabing, M.D., Cincinnati, O.  
 Maxwell Finland, M.D., Boston, Mass.  
 M. B. Sulzberger, M.D., New York, N. Y.  
 Clyde L. Randall, M.D., Buffalo, N. Y.  
 G. N. Papanicolaou, M.D., New York, N. Y.

The complete program will be published in the December number of *JMSMS*. Meanwhile, General Chairman of Arrangements C. E. Umphrey, M.D., Detroit, urges all who plan to attend this new-type "refresher course" to secure hotel reservations in Detroit now. Last year, 1,654 doctors of medicine attended the MCI, taxing the capacity of every hotel in Detroit.

## SIXTH ANNUAL SYMPOSIUM ON TRAUMA

Sponsored by  
 Wayne State University College of Medicine and  
 Michigan Regional Committee on Trauma

Wednesday, December 4, 1957

Registration: 9:00 a.m.

*Morning Session:* Ward Rounds and Operating Procedures at Detroit Receiving Hospital

*Noon Luncheon:* Wayne State University College of Medicine

*Afternoon Session:* "The Many Phases of the Care of Trauma Patients"

Write: H. M. Smathers, M.D.  
 14219 W. McNichols Road  
 Detroit 35, Michigan



**NOW**—EFFECTIVE STEROID HORMONE  
THERAPY OF RHEUMATIC AFFECTIONS  
WITH GREATER SAFETY AND ECONOMY



# PABALATE-HC

Robins

*Pabalate with  
Hydrocortisone*

Clinical evidence indicates that, in Pabalate-HC, the synergistic antirheumatoid effects of hydrocortisone, salicylate, para-aminobenzoate, and ascorbic acid achieve satisfactory remission of symptoms in up to 85% of cases studied

- with a much higher degree of safety
- even when therapy is maintained for long periods
- at significant economy for the patient

Each tablet of Pabalate-HC contains 2.5 mg. of hydrocortisone — 50% more potent than cortisone, yet not more toxic.

## FORMULA

### In each tablet:

Hydrocortisone (alcohol) ..... 2.5 mg.  
Potassium salicylate ..... 0.3 Gm.  
Potassium para-aminobenzoate. 0.3 Gm.  
Ascorbic acid ..... 50.0 mg.

DOSAGE: Two tablets four times daily.  
Additional information on request.

AVAILABLE  
FOR YOUR  
PRESCRIPTION  
**NOW**

A. H. ROBINS CO., INC. RICHMOND 20, VIRGINIA  
*Ethical Pharmaceuticals of Merit since 1878*

New Chemotherapy

# ARALEN<sup>®</sup> *in*

## RHEUMATOID

# ARTHRITIS

*Extensive studies of rheumatoid arthritis and related collagen diseases—in this country and abroad—have shown the antimalarial Aralen phosphate to be highly effective and well tolerated in a large percentage of patients.*

### Clinical Results with Aralen in Rheumatoid Arthritis

Author	No. of Cases	Major Improvement	Minor Improvement	No Effect
Nayda <sup>1</sup>	28	22	5	1
Finckh <sup>2</sup>	25	12	4	9
Freundman <sup>3</sup>	60	43	3	4
Berglund <sup>4</sup>	108	77	12	19
Kochner <sup>5</sup>	36	32	0	4
Cohen and Culkin <sup>6</sup>	22	17	3	2
Scherbel et al. <sup>7</sup>	25	9	8	8
<b>Total</b>	<b>294</b>	<b>212 (72%)</b>	<b>35 (12%)</b>	<b>47 (16%)</b>

- Success dependent upon persistent treatment
- Often of benefit where other agents have failed
- Remissions on therapy well maintained
- Remission of 3 to 12 months possible even if treatment is interrupted
- Tachyphylaxis not evident

#### GENERAL EFFECTS:

- Patient feels better
- Patient looks better
- Exercise tolerance increases
- Walking speed and hand grip improves

#### LABORATORY EFFECTS:

- E. S. R. may fall slowly
- Hemoglobin level may gradually rise

#### ANALGESICS AND STEROIDS:

- Requirements usually reduced or eliminated

#### JOINT EFFECTS:

- Pain and tenderness relieved
- Mobility increases
- Swellings diminish or disappear
- Muscle strength improves
- Rheumatic nodules may disappear
- Even severe or advanced deformity may improve
- Active inflammatory process usually subsides
- Joint effusion may diminish

#### DOSAGE:

Aralen is cumulative in action and requires four to twelve weeks of administration before therapeutic effects become apparent.

Latest information indicates that an initial daily dose of 250 mg. of Aralen phosphate is preferable to the higher doses sometimes recommended. However, if side effects appear, withdraw Aralen for several days until they subside. Reinstate treatment with 125 mg. daily and, if well tolerated, increase to 250 mg. The usual maintenance dose is 250 mg. daily.

# New Chemotherapy

## INDICATIONS:

- Rheumatoid arthritis, acute or chronic—  
with or without adjunctive therapy.
- Spondylitis
- Arthritis associated with lupus  
erythematosus or psoriasis

## HOW SUPPLIED:

**Aralen phosphate:** 250 mg. tablets in bottles of 100 and 1000.  
125 mg. tablets in bottles of 100.

## Tolerance:

Aralen is usually well tolerated. Toxic effects are usually mild and to date have been transitory in nature, disappearing completely either on continuance or cessation of therapy or on reduction in dosage.

Gastrointestinal disturbances (e.g. nausea, rarely vomiting, diarrhea, abdominal cramps, anorexia) are frequent manifestations of intolerance. Temporary blurring of vision (due to interference with accommodation) is also relatively frequent.

Pleomorphic skin eruptions (e.g. lichenoid, maculopapular, purpuric), although generally mild, may preclude the use of an optimum dosage schedule. If a skin reaction persists on a reduced dosage schedule, or recurs after reinstitution of treatment with gradually increasing doses, discontinue Aralen till the lesion again disappears and consider resuming treatment with Plaquenil® (brand of hydroxychloroquine).

Less frequently transitory vertigo, headache, lassitude, or neurological disturbances, such as nervousness, irritability, emotional change, and nightmares have been reported. Instances of unexplained slight gradual weight loss as the patient's general health and arthritic condition improved have been mentioned. Occasional instances of bleaching (depigmentation) of the hair have been described.

Although an occasional instance of leukopenia, with normal differential count, has been reported (WBC about 3000), it has not proved troublesome because it has always been reversible on discontinuance, or diminution of the dose. Even spontaneous reversal may occur while full dosage is maintained.

## THEORY OF ACTION:

Aralen appears to suppress or induce remission of rheumatoid inflammatory processes by inhibiting adenosinetriphosphatase.

## Caution:

Aralen is known to concentrate in the liver and, although hepatic damage has never been reported, the drug should be used with caution in the presence of liver disease. In the presence of severe gastrointestinal, neurological, or blood disorders, the drug should be used with caution or not at all. If such disorders occur during the course of therapy, the drug should be discontinued. Concomitant use of gold or phenylbutazone with Aralen should be avoided because of the tendency of these agents to produce drug dermatitis.

## Clinical Comments:

Of fifty patients receiving Aralen therapy, "43 have become really well; that is, they have no stiffness, and any pain that occurs can reasonably be attributed to use of joints affected by secondary degenerative changes. They have no evidence of joint inflammation, but may have a raised erythrocyte sedimentation rate. They have little or no need for analgesics."

Freedman<sup>3</sup>

"One hundred and twenty-five private patients have been carefully followed clinically and haematologically while receiving well over 200 patient-years of chloroquine (Aralen) therapy. The results are considered good in 70%, one-half of these cases being in remission. Improved work performance, sedimentation rate, and hemoglobin levels paralleled the major objective gain in this 70%. 90% of them remained on chloroquine (Aralen) therapy, half for more than two years. Classical peripheral rheumatoid arthritis, spondylitis, arthritis of juvenile onset, and rheumatoid disease with psoriasis, all appeared to respond about equally well.

"It is suggested that chloroquine comes closer to the ideal for long-term, safe, control of rheumatoid disease than any other agent now available."

Bagnall<sup>4</sup>

"Out of the 36 rheumatoid arthritis cases we treated . . . favorable results were obtained in 32 cases."

Bruckner et al.<sup>5</sup>

## References

1. Haydu, G.G.: Rheumatoid arthritis therapy: a rationale and the use of chloroquine diphosphate, *Am. J. M. Sc.* 225:71, Jan., 1952.
2. Rinehart, R.E.: Chloroquine therapy in rheumatoid arthritis, *Northwest Med.* 54:713, July, 1955.
3. Freedman, A.: Chloroquine and rheumatoid arthritis, a short-term controlled trial, *Ann. Rheum. Dis.* 15:251, Sept., 1956.
4. Bagnall, A.W.: The value of chloroquine in rheumatoid disease, a four year study of continuous therapy, read at the Ninth International Congress on Rheumatic Diseases in Toronto, Canada, June 22-28, 1957.
5. Bruckner L., and Rosenzweig, S.: Treatment of chronic rheumatoid arthritis with synthetic antimalarials, read at the Ninth International Congress on Rheumatic Diseases in Toronto, Canada, June 22-28, 1957.
6. Cohen, A.S., and Calkins, Evan: A controlled study of chloroquine as an antirheumatic agent, read at the Ninth International Congress on Rheumatic Diseases in Toronto, Canada, June 22-28, 1957.
7. Scherbel, A. L., Schuchter, S.L., and Harrison, J.W.: Comparison of effects of two antimalarial agents: hydroxychloroquine sulfate and chloroquine phosphate, in patients with rheumatoid arthritis, *Cleveland Clin. Quart.* 24:96, April, 1957.

Winthrop LABORATORIES  
NEW YORK 18, N. Y.

when a cold takes hold  
counteract all the symptoms

To curb and control even the severest cold symptoms,  
**CORICIDIN® FORTÉ** Capsules offer the combined benefits  
of clinically proved CORICIDIN—plus—

*methamphetamine* —to counteract depression and fatigue  
*vitamin C* —to meet added requirements during stress of illness  
*antihistamine* —in full therapeutic dosage

**CORICIDIN FORTÉ** provides comprehensive therapy not only  
to counteract congestive and coryzal symptoms  
of the severest cold but also to combat lassitude, fever, aching  
muscles, torpor, depression and general malaise.

*Schering*

EN-J-7107



there are many ways of looking at a cold

from all angles...best for severe colds

# CORICIDIN® FORTÉ

CAPSULES

Each CORICIDIN FORTÉ Capsule provides

CHLOR-TRIMETON® Maleate	4 mg.
(chlorpropenpyridamine maleate)	0.19 Gm.
Salicylamide	0.13 Gm.
Phenacetin	0.03 Gm.
Caffeine	0.05 Gm.
Ascorbic acid	1.25 mg.
Methamphetamine hydrochloride	

in bottles of 100 and 1000 capsules.

SCHERING CORPORATION • BLOOMFIELD, NEW JERSEY

CR-J-12107

*Schering*



when you need to give the patient  
with a cold the benefit of the doubt

## CORICIDIN<sup>®</sup> WITH PENICILLIN

T A B L E T S

dual control with clinically proved CORICIDIN and oral penicillin—  
arrest the cycle of cold symptoms  
forestall bacterial infection

Each CORICIDIN with Penicillin Tablet contains  
Penicillin G procaine . . . . . 150,000 units  
CHLOR-TRIMETON<sup>®</sup> Maleate  
(chlorphenpyridamine maleate) . . . . . 2 mg.  
Aspirin . . . . . 0.15 Gm.  
Phenacetin . . . . . 0.12 Gm.  
Caffeine . . . . . 0.03 Gm.  
Bottles of 24, 100.

CM-J-10107

SCHERING CORPORATION • BLOOMFIELD, NEW JERSEY *Schering*

in **ECZEMA**

**Family Physicians  
use**

**specific  
desensitization  
for**

**\*lasting immunity**

**... easily, pleasantly and economically**

**SPECIFIC DESENSITIZATION**

is easily accomplished, quickly and accurately by any physician. Simply scratch test each patient by using activated Barry allergens to determine what offends the patient. Then send a list of these offenders with their reactions to Barry for the preparation of a specific desensitization formula which promotes, *lasting, active immunity*. For scratch testing your patients, request the specific assortment of activated allergens which may include foods, epidermals, dusts, fungi, bacteria or pollens. A brief history of your patient will permit us to select the assortment your patient requires. This is a safe, simple, time-proven technique and comes to you complete with directions for use by your nurse.

**\* write for free literature**

**LASTING ACTIVE IMMUNITY**

is obtained by desensitizing your patient for the specific irritants to which your patient reacted by the scratch test. Each desensitization formula is individually prepared for each patient according to his own needs based upon the list of irritants that you supply, and the degree of reaction for each. Specific desensitization against irritants such as foods, epidermals, dust, fungi, bacteria and pollens immediately *promotes active immunity*, lasting longer than any other known medication. Each specific treatment is prepared in a three vial serial dilution set (20 doses) and includes a personalized treatment schedule indicating the correct interval to use between injections. For your patients that have already been skin tested by any means, simply send their list of offenders to the Allergy Division. Prompt, 7-10 day service on all Rx's.

**FREE**

**For the physician**  
Complete HANDBOOK OF ALLERGY  
FOR THE GENERAL PRACTITIONER

**For the nurse**  
ALLERGY TESTING, A MANUAL FOR  
THE NURSE ASSISTANT

**Send for yours today**

**BARRY LABORATORIES, INC.**

Allergy Division  
DETROIT 14, MICHIGAN



## Flu Fight

Drug Firms Speed U  
Vaccine Output, But  
Will the U.S. Need I

Asiatic Virus Raises Thre  
Government Buys, Pro  
nd Hens Have to Help

### 8 STUDENTS ON FLIGHTS TO U.S. HAVE ASIAN FLU

New York, Aug. 15 (AP)—Laboratory tests on eight foreign exchange students arrived Aug. 8 show they are victims of Asiatic flu, the health department reports today. The eight arrived on a plane from Europe.

Twenty-nine other students suffering from influenza arrived Tuesday from Rotterdam on the ship Arosa Sky. One, Nicholas Memmos, a Greek exchange student, died yesterday. Six of these students were released today; the others are to be released tomorrow. It has not been determined whether any died from Asiatic flu.

Pea  
vac  
izat  
flov  
the  
ority  
States

## THE INFLUENZA

How Deadly Will it Be  
What Can We Do about

## IF YOU

Answer

A new  
—is showing  
around the  
now have

## U.S. Fighting Asiatic

## The War On Asiatic Flu

There's cause for concern about Asiatic flu, but scientists and public health officials see no reason for anyone to panic.

First shipments of the vaccine against the new influenza strain have arrived in Chicago, setting off a flood of telephone calls from worried patients to doctors, and from doctors to drug suppliers. This is a normal pattern of mass fear and is understandable.

Even though Salk vaccine priorities were necessary, the regulation produced administrative headaches, public complaints and probably a gray, if not a black market. When regulation is invoked, it would be

### PUBLIC HEALTH

## Influenza M

INFLUENZA, one of the most undetectable of communicable diseases, is moving "on cat feet" across the nation now. It has already struck once this year in mild epidemic form at an Air Force base in Colorado. When and how severe it will strike again is a perennial riddle for public health authorities.

It will probably not lie dormant the rest of the winter months. At the same time there will be sporadic outbreaks throughout the country. If conditions occur, it could spread

## War on Mutant A

Florence was in the grip of an epidemic of colds, coughs and fevers, astrologers declared that it was caused by the influence of an unusual conjunction of planets. This sickness is known as "influenza"—Chronicles of 1200-1470.

to combat new race," a worldwide week in response in the Far East. So the World Health Organization, which collects information around the globe, warns of the emergence of the new virus. In more than a decade those of the

## Asian Flu: the Outlook

Asian influenza will hit the U.S. this fall before mass immunization can be effective, and the nation faces an epidemic which may strike 15 million to 30 million people. The disease is relatively mild (in no way comparable to the killing "Spanish flu" of 1918-19), and is likely to cause only a small number of deaths among the feeble young and enfeebled old. But it may compel 10% to 20% of the population in affected areas to take

W/  
quie  
a co  
pect  
Serv  
non

to counteract  
complications from

EPIDEMIC

What Is Causing It?


"ORIENTAL FLU"

CATCH "ASIATIC" FLU—

About the New Virus Threat From Orient

"Far East" flu  
where and there  
suspected cases  
in the U.S.

Flu

  
**Erythrocin**<sup>®</sup>

STEARATE (Erythromycin Stearate, Abbott)

effective against staph-, strep- and pneumococci

Abbott

Strike

in the structure of the vir-  
make presently used vaccines  
the illness.

such a sudden change too  
type A virus in 1947, D  
Much of the vaccine th  
survival

# Statement of Principles Between Physicians and Lawyers

After three years' study, the Joint Committee with the State Bar of Michigan developed a statement of principles to guide doctors of medicine and members of the Bar in the conduct of court cases. This statement has been approved by both the Michigan State Medical Society in Annual Session in Grand Rapids, September 23-24, and by the State Bar of Michigan, at its Detroit Convention of October 2-3-4, 1957.

The Joint Committee which developed these principles was composed of three MSMS members and three representatives of the State Bar: W. M. LeFevre, M.D., Muskegon, Chairman for the medical group, A. A. Humphrey, M.D., Battle Creek, and F. D. MacMillan, M.D., Detroit. Leroy G. Vandever, Detroit, Chairman for the legal group, Frank C. Smith, Flint, and J. Adrian Rosenberg, Jackson.

The Statement of Principles is as follows:

## Preamble

In recognition of the public service obligations common to the medical and legal professions, and in the belief that such action will promote a closer co-operation and assist in maintaining a harmonious and compatible relationship between the two professions, thus serving the public interest, the Michigan State Medical Society and State Bar of Michigan do hereby adopt the following Statement of Principles governing physicians and lawyers.

## Medical Reports Requested by Attorneys

1. Where a report is requested by the patient's attorney, upon authorization from the patient, the physician should furnish to the attorney such report with reasonable promptness.

2. The contents of such report should be such as to permit the attorney to protect the interests of the patient fully and properly and compatibly with the attorney-client relationship.

3. When requesting such report, the attorney should clearly specify the information desired, and make known to the physician whether or not it is to embody opinions regarding diagnosis, prognosis and disability evaluation.

4. The attorney should recognize that it is not always possible for the physician to prepare a medical report on short notice. Where the physician may indicate that he deems it necessary or advisable before submitting such report to have the opportunity of seeing and examining the patient, the attorney should co-operate with the physician by arranging for his client to be seen by the physician.

5. When a medical report is requested by an attorney, he should not take the time of the physician for a conference unless:

- (a) It appears to the attorney that a conference is necessary for a proper report, or
- (b) The physician requests such a conference before furnishing his report.

6. After the physician has furnished a report, if either the physician or the attorney feels it necessary or desirable to hold a conference with reference to the contents of the report, the attorney should be cognizant of the demands of time made upon the physician, and

should co-operate to arrange such conference at a time and place indicated by the physician to be most convenient and suitable.

## Co-operation between Physician and Attorney in Cases Expected to be Tried and Where Attorney Proposes to Present Physician as a Witness

1. It is the duty of the attorney to furnish to the physician reasonable advance notice that the case is approaching trial, and that the physician is expected to be called as a witness on the trial of the case.

2. It is the duty of the attorney to make inquiry and ascertain from the physician as to any hospital records in appropriate cases, or other records not under the direct control or possession of the physician, including x-rays or reports thereof or other medical records and reports the physician desires to have available at the time of his being a witness on the trial of the case, and to make the necessary arrangements so that such reports are thus available for the use of the physician at such time.

3. It is the duty of the attorney to request and remind the physician to bring with him at the time he appears as a witness his own office records with reference to his patient.

4. It is the duty of the attorney, after the physician requests the opportunity of seeing and examining the patient before trial, to arrange for the patient to be seen by the physician.

5. It is the duty of the physician at this time to review his own office records and any other records pertaining to his patient so as to co-operate with the attorney in the preparation of the trial of the case.

6. While the physician may have heretofore furnished a medical report to the attorney, the physician should recognize that such prior report was likely furnished for the principal purpose of permitting the attorney to properly plead his client's medical claims in the case. The physician should further recognize that at this time, for the attorney to fully protect the interest of his client, it may be necessary or advisable for the attorney to request a supplemental and amplified report in the preparation for the trial of the case, and it is the duty of the physician to co-operate with the attorney where authorized by the patient to furnish such supplemental and amplified medical report.

7. In some cases, it should be recognized by both the attorney and the physician that it is necessary or most desirable that a conference or conferences be had between the attorney and the physician in advance of the physician appearing as a witness on the trial of the case, whereby the physician is afforded an opportunity of discussing with the attorney the medical aspects of the case from the physician's viewpoint, particularly any technical medical matters pertaining thereto. An opportunity is thus afforded to the attorney of discussing with the physician the legal rules and the position occupied by the physician as a witness on the trial of the case, resulting in mutual co-operation for the best interest of the patient of the physician and the client of the attorney in the presentment of the case in court. Where, however, the physician and attorney mutually agree that such a conference is unnecessary it should be avoided in the interest of saving the time of both the physician and the attorney. Where such conference or conferences are deemed necessary or advisable, the attorney should recognize a duty to arrange for the

(Continued on Page 1378)

consider

# ACHROCIDIN

when treating

# ASIAN FLU

## Tablets

Each tablet contains:

ACHROMYCIN® Tetracycline	125 mg.
Phenacetin	120 mg.
Caffeine	30 mg.
Salicylamide	150 mg.
Chlorothal Citrate	25 mg.

## Syrup

Each teaspoonful (5 cc.) contains:

ACHROMYCIN® Tetracycline	125 mg.
equivalent to tetracycline HCl	120 mg.
Phenacetin	150 mg.
Salicylamide	25 mg.
Ascorbic Acid (C)	15 mg.
Pyridamine Maleate	4 mg.
Methylparaben	1 mg.
Propylparaben	

Available on prescription only

The ACHROCIDIN formula is particularly valuable in treating acute respiratory infections during epidemics and other outbreaks.

In addition to *rapid symptomatic improvement*, ACHROCIDIN offers *prompt control of the bacterial superinfection* frequently responsible for such disabling complications as pneumonia, otitis media, sinusitis, bronchitis, pneumonitis to which the patient may be vulnerable.

The comprehensive ACHROCIDIN formulation includes both *ACHROMYCIN* Tetracycline—broad-spectrum antibiotic action—and *analgesic components* recommended for rapid relief of malaise, headache, muscular pain, pharyngeal and nasal discharge.

Adult dosage for ACHROCIDIN Tablets and new, caffeine-free ACHROCIDIN Syrup is two tablets or teaspoonfuls of syrup three or four times daily. Dosage for children according to weight and age.

# ACHROCIDIN\*

TETRACYCLINE-ANTIHISTAMINE-ANALGESIC COMPOUND

LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK

\*Trademark



*(Continued from Page 1376)*

time and place for such conference or conferences as most convenient and suitable to the physician.

8. It is the duty of the attorney, in accordance with the ethics of his profession, that under no circumstances should he seek or attempt, in any manner, to persuade the physician to distort or color his testimony.

9. The physician should recognize the moral, as well as the legal, obligation of appearing in court as a witness on behalf of his patient, and should understand that medical testimony is frequently indispensable to prove or disprove medical claims presented in a case.

### **The Physician as a Witness on the Trial of the Case**

1. It is required that parties, attorneys and witnesses, including physicians who are called to testify, recognize that the administration of justice by the courts and the trial of cases by the judges thereof cannot depend upon the convenience of such persons.

2. The attorney owes a duty to the physician who is to be a witness on the trial of the case to notify him as far in advance as possible as to when he is to be needed to testify, and to keep him informed and advised as to any changes with respect to the time of his appearance in court as the trial develops.

3. The attorney should notify the physician promptly of any settlement or other development during the trial of the case, the result of which is to eliminate the calling of the physician as a witness on the trial, so that the physician, who likely has set aside the time in which he is expected to be in court as a witness, may have the opportunity of making other commitments for this time.

4. The attorney should have available for the physician when he appears as a witness all hospital and any other records which the attorney and physician have theretofore agreed shall be at the place of trial for the physician's use.

5. The physician should attend court at the time appointed. The attorney should appreciate, however, that a physician has continuing and often unpredictable responsibilities to his patients. Insofar as the attorney is able, he should make arrangements to permit the physician to testify with a minimum of inconvenience and delay to him.

6. The physician while testifying should answer questions as concisely and objectively as possible, with a terminology, when permissible, which will be most understandable to a jury of laymen.

7. If the physician is asked a question to which he does not know the answer, he should so state and make no attempt to speculate or guess or theorize or give answers not responsive to the question propounded, and the physician should not volunteer testimony.

8. In the giving of testimony, the physician, under no circumstances, should permit any bias, prejudice or favoritism or personal interest to influence or affect his testimony.

9. When questioning the physician witness, an attorney should at all times refrain from unwarrantedly browbeating or badgering the physician. A physician testifying as a witness should know that if and when he feels that an attorney is improperly or unfairly conducting an examination of him as a witness, the physician may address the court and inquire if he is required to submit to such treatment.

10. The attorney owes a duty to the physician witness to prepare and propound all questions to the witness in such form and manner as will permit a clear understanding and a forthright answer from the physician witness.

11. An attorney who calls a physician to testify as an expert witness should, in advance of the physician's appearance in court, advise the physician of his intention to qualify and question him as an expert witness, and where it is proposed to use a hypothetical question,

should in advance of the trial converse with the physician and explain to him the use of such hypothetical question, so that at the time the physician in his capacity as an expert witness is propounded such question, he will have a reasonable understanding of the use of the hypothetical question and the limitations with reference to his answer to such form of question.

### **Compensation for Services of Physicians**

1. It is the duty of the attorney where necessary, to explain to his client the physician's bill for services and the itemization thereof. In cases where the physician aided in preparing the case but did not have the opportunity to testify or failed to testify because of a settlement prior to his being called as a witness, it is the responsibility of the attorney to advise his client of the physician's assistance and services in the case, and thus to co-operate with the physician for the purpose of seeing that such physician receives a reasonable fee for such services.

2. A physician who, at the request of an attorney, furnishes a medical report authorized by the patient, should receive a nominal fee for this service, and it is the duty of the attorney to co-operate with the physician to see that he receives such fee. If such medical report requires extraordinary services in its preparation either as to time and contents, or the case is of such a nature that the medical aspects thereof require the physician to have a conference or conferences with the attorney, or to furnish subsequent supplemental and/or amplified medical report, the physician is entitled to a reasonable compensation for such professional services rendered, and it is the duty of the attorney to co-operate to see that such physician receives reasonable compensation in rendering such professional services. Where, after an original medical report, the physician is requested to perform further services in assisting in the preparation of the case for trial by furnishing supplemental or amplified reports and conferring with the attorney or rendering other services, it is recommended that when feasible, an agreed fee for such services be determined in advance after consultation with the attorney.

3. Where it appears that the patient is indigent or unable to make payment, the right to compensation for services in assisting the attorney in the preparation of the case for trial may be waived by the physician, or where it appears that the financial status of the patient is such that ordinary reasonable compensation to the physician for his services will work a hardship, the physician may take this into consideration in determining his fee for services in assisting the attorney in the preparation of the case for trial.

4. Where a physician testifies as a witness, under no circumstances should the physician's charge for his time as a witness, or his fee, if qualified and testifying as an expert witness, be contingent or determined by the amount of the recovery of the patient in the litigation, or the success or lack of success of the patient's case.

5. Compensation for the services of a physician in connection with assisting in the preparation of the case or for his appearance as a witness in court should be on a reasonable basis and based on the time and nature of the services performed.

6. It is the duty of the attorney to co-operate fully with the physician by assisting the physician to obtain payment for services properly rendered by the physician to his patient in the physician-patient relationship. It is the further duty of the attorney to co-operate with the physician to obtain payment from the patient for services rendered by the physician to the attorney in the preparation and/or trial of the patient's case.

### **Inter-Professional Courtesy and Understanding**

1. For the medical and legal professions to perform the full duties owed to society by each, it is required that the members of each profession extend toward the

*(Continued on Page 1394)*

optimal dosages for ATARAX.  
based on thousands of case histories:

**25** mg. (q.i.d.)

for these **25** adult indications:

TENSION	SENILE ANXIETY	MENOPAUSAL SYNDROME	ANXIETY	PREMENSTRUAL TENSION
PHOBIA	HYPOCHONDRIASIS	TICS	FUNCTIONAL G. I. DISORDERS	PRE-OPERATIVE ANXIETY
HYSTERIA    PRENATAL ANXIETY    AND ADJUNCTIVELY IN CEREBRAL ARTERIOSCLEROSIS				
PEPTIC ULCER	HYPERTENSION	COLITIS	NEUROSES	DYSPNEA    INSOMNIA
PRURITIS	ASTHMA	ALCOHOLISM	DERMATITIS	PARKINSONISM    PSORIASIS

perhaps the safest ataraxic known

PEACE OF MIND **ATARAX**<sup>®</sup>  
(BRAND OF HYDROXYZINE)    Tablets-Syrup

Supplied: In tiny 10 mg. (orange) and 25 mg. (green) tablets. Also now available in 100 mg. tablets. Bottles of 100. ATARAX Syrup, 10 mg. per tsp., in pint bottles. Prescription only.

**10** mg. (t.i.d.)

for these **10** pediatric indications

ANXIETY    TICS  
TEMPER TANTRUMS

**NOW: SAFE... QUICK**

**ATARAX<sup>®</sup> PARENTERAL SOLUTION**

when Peace of Mind can't wait

In daily practice: always have it handy

- to calm the acutely disturbed or hysterical patient
- to rehabilitate the alcoholic

In hospitals: use it routinely

- to make overwrought patients manageable without loss of alertness
- to allay anxiety and control vomiting before and after surgery and childbirth

Supplied: 10 cc. multiple-dose vials. The adult dosage is 25 mg. to 50 mg. (1-2 cc.) intramuscularly, 3 to 4 times daily, at 4 hour intervals. The moderated dosage level for children under 12, when given intramuscularly, has not yet been established, and the oral dosage should be used.



NEW YORK 17, NEW YORK



# Heart Beats

---

## PHYSICIAN'S MANUAL ON CONGENITAL CARDIAC DEFECTS PUBLISHED

The American Heart Association has issued a new booklet entitled "Congenital Cardiac Defects—A Physician's Guide for Evaluation and Management." The publication was prepared by the Committee on Congenital Heart Disease of the Association's Council on Rheumatic Fever and Congenital Heart Disease, Ruth Whittemore, M.D., Chairman.

Designed primarily for the physician who is not a cardiologist, the 27-page booklet will help doctors who encounter patients with congenital malformations of the heart to decide whether and when such patients should have special studies done in a cardiac center or by a cardiologist familiar with these problems.

The Association has also issued a report setting standards for services and equipment in centers responsible for the diagnosis and surgical care of patients with congenital defects of the heart and blood vessels. The report, entitled "Standards for Centers Caring For Patients with Congenital Cardiac Defects," appeared originally in the April, 1956, issue of the Association's professional journal, *Circulation*, and is of particular interest to directors of centers concerned with diagnosis and surgery for patients with congenital cardiac defects. The report was prepared by the American Heart Association's Subcommittee on Education and Standards in the Field of Congenital Heart Disease.

Single copies of both pamphlets are available free from the Michigan Heart Association at the address listed below.

## RESEARCH GRANTS FOR THE STUDY OF THE EFFECT OF ASIAN INFLUENZA UPON THE CARDIOVASCULAR SYSTEM

Recognizing the possibility that Asian influenza may appear in sizeable quantity in this country in the near future, the National Advisory Heart Council has recommended that the National Heart Institute encourage research on the effects of Asian influenza upon the cardiovascular system.

National Heart Institute research grants are available on a competitive basis to investigators wishing to study the cardiovascular-renal effects of influenza. Applications will be processed as rapidly as possible. Research grant applications may be obtained by writing directly to: Dr. Her-

man E. Schmid, Jr., Grants and Training Branch, National Heart Institute, National Institutes of Health, Bethesda 14, Maryland.

## NEW PROFESSIONAL FILM SHOWS DISORDERS OF THE HEART BEAT

"Disorders of the Heart Beat" is the title of a new 22-minute professional film produced in color for the American Heart Association and its affiliates by Churchill-Wexler, Los Angeles. Wyeth Laboratories, Philadelphia, sponsored the production.

Using animation, the motion picture explains the theory of how abnormal heart beats develop and shows how these look on the electrocardiogram and phonogram. The film presents aspects of premature beats, paroxysmal tachycardia, fibrillation and flutter, and various conduction defects.

The new film is available—on a free-loan basis—from the Michigan Heart Association.

## BOOKLET ON HIGH BLOOD PRESSURE AVAILABLE TO PHYSICIANS TREATING HYPERTENSIVE PATIENTS

"High Blood Pressure" is the title of a new American Heart Association booklet written by Edgar V. Allen, M.D., Association President, who is Senior Consultant in Medicine at the Mayo Clinic, Rochester, Minnesota.

*To be distributed by physicians to high blood pressure patients under their care*, the 14-page booklet explains what is known today about high blood pressure and what the patient can do to help his physician treat him most effectively.

Dr. Allen warns against self-diagnosis and excessive concern of a hypertensive patient with the blood pressure readings. The author stresses that so much has been learned in recent years about how to treat hypertension that the outlook for patients is now more favorable than ever before.

Single copies are available free from the Michigan Heart Association.

\* \* \*

For further information or copies of the materials listed above, write to the Michigan Heart Association, Doctors' Building, 3919 John R, Detroit 1, Michigan.

The  
Upjohn Company  
announces  
a major  
corticosteroid  
improvement

minor  
chemical  
changes  
can mean  
major  
therapeutic  
improvements

# Medrol\*

The most  
efficient of all  
anti-inflammatory  
steroids

Supplied: Tablets of 4 mg., in bottles  
of 30 and 100.

\*TRADEMARK FOR METHYLPREDNISOLONE, UPJOHN



- Lower dosage  
( $\frac{1}{2}$  lower dosage  
than  
prednisolone)
- Better tolerated  
(less sodium  
retention, less  
gastric irritation)

For  
complete information, consult  
your Upjohn representative,  
or write the Medical Department,  
The Upjohn Company,  
Kalamazoo, Michigan.

**Upjohn**

# AMA Washington Letter

---

## THE MONTH IN WASHINGTON

Several months in advance of the return of the 85th Congress for its election-year second session, influential figures in the field of health in both the executive branch and in Congress were being heard on what 1958 has in store for the medical profession.

Because of the roles they play in the Capital, their views are worth more than passing notice. One is the chairman of the important health appropriations subcommittee of the House, Rep. John Fogarty (D., R. I.). He used as a forum for his prophecies the annual convention of the American Hospital Association.

Other prognostications came from Dr. Aims C. McGuinness, special assistant for health and medical affairs to Secretary Folsom of the Department of Health, Education, and Welfare. Dr. McGuinness spoke out at a dedication ceremony of a new chronic disease and rehabilitation facility in Maine.

Mr. Fogarty places at the top of his predictions some action on federal construction aid to medical schools. The Rhode Island Democrat has his own bill on the subject, although there are others pending. Comments Mr. Fogarty: "... the shortage of health education facilities today is probably the most serious bottleneck in our whole medical system. . . . These schools . . . fall far short of accommodating the fully qualified and competent young men and women in America who are anxious to train and qualify in medical, dental and public health fields."

The record of the past several years has shown that no member of the House is listened to more carefully when it comes to health than Mr. Fogarty. His philosophy in the health field is worth noting: "It is now generally accepted that the health of our people is a major resource and that the government, therefore, has a direct responsibility for the health of everyone."

Dr. McGuinness also spoke out strongly for federal aid to medical schools. Failure to meet the needs of the schools, he told his audience, would be "the worst kind of economy." He feels that the administration proposal for \$225 million in construction grants would bring classrooms and research laboratories "much closer to current and projected needs."

While neither man had any specific legislative proposals to make in the field, both foresee a growing role for hospitals in the practice of medicine. Dr. McGuinness put it this way: "General hospitals must broaden their services and achieve greater co-ordination. The term 'hospital care'

should include not only bed care but diagnostic service as well as service to ambulatory patients."

Mr. Fogarty, looking ahead 25 years, said it was safe to predict that virtually every general hospital in the Nation will be providing at least as much preventive service as curative service. "You are, in fact, moving closer each moment to the day when hospitals will be the focal point of health services for all of us, throughout our entire lives."

The same day that Mr. Fogarty was urging the hospitals to use the basic Hill-Burton hospital construction program to meet future health needs, the AHA House of Delegates approved a set of legislative proposals to present to the next session.

They would accomplish the following: (1) extend the act for five years beyond June, 1959, (2) authorize matching Hill-Burton funds for renovation and repairs of hospital plants, (3) set up loan authority so that hospitals not desiring grant money could borrow construction and renovation funds at very low interest rates (from 1½ to 2%). The house also urged a grants program to hospitals with nursing schools and to other nurse institutions for professional education, exclusive of construction grants.

### Notes

One committee of Congress knows months in advance just exactly what it plans to do the day Congress reconvenes. The tax-writing House Ways and Means Committee has set hearings starting January 7 on possible tax reductions next year.

Included on the agenda will be testimony from various organizations on the Jenkins-Keogh bills for allowing tax deferments for money paid into retirement plans. The American Thrift Assembly, which is backed by the American Medical Association and other professional and business groups, plans to be heard at some time during the 30 days of hearings.

\* \* \*

Veterans Administrator Harvey Higley believes that the public is losing interest in the veteran and his problems, and that some doctors no longer hesitate to attack medical care for veterans, particularly those with non-service-connected disabilities. Mr. Higley spoke at the annual American Legion convention.

\* \* \*

Health directors of twenty-one American republics, holding their annual Pan American Sanitary Organization meeting here this fall, voted a \$3 million budget for the Pan American Sanitary Bureau's 160-odd health projects for next year.

in acne



*"results were uniformly encouraging"*<sup>1</sup>

**pHisoHex®**

*Sudsing,  
nonalkaline  
antibacterial  
detergent—  
nonirritating,  
hypoallergenic.*

The acne skin that is "surgically clean" is the one most likely to clear completely. Hodges<sup>1</sup> found that standard acne treatment usually results in "mediocre success" for most patients. *The addition of pHisoHex® washings to standard treatment produced results that far excel any obtained previously.*

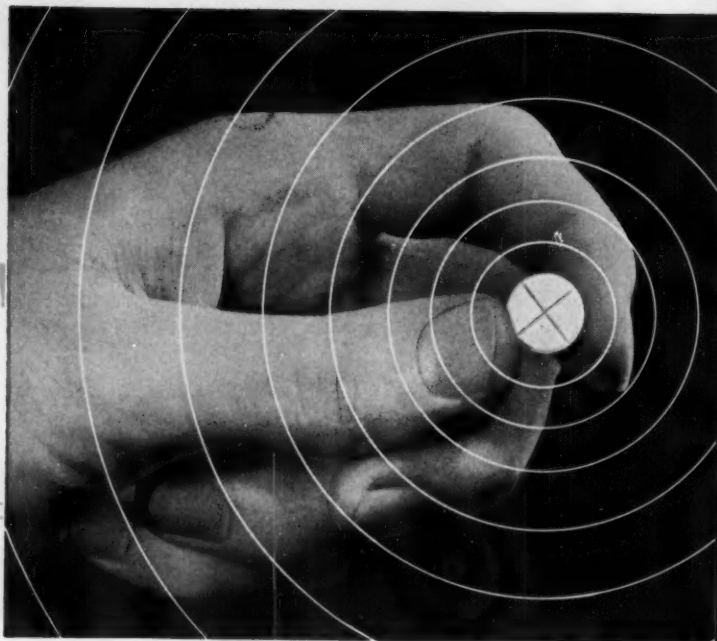
pHisoHex, a powerful antibacterial skin cleanser containing hexachlorophene, removes oil and virtually all the bacteria from the skin surface.

For best results prescribe from four to six pHisoHex washings of the acne area daily.

1. Hodges, F. T.: GP, 14:86, Nov., 1956.  
pHisoHex, trademark reg. U. S. Pat. Off.

**Winthrop** LABORATORIES  
New York 18, N. Y.

ONLY  
**ONE**  
TABLET  
A  
DAY



now ...  
unprecedented  
Sulfa  
therapy

# KYNEX\*

SULFAMETHOXYPYRIDAZINE LEDERLE

New authoritative studies prove that KYNEX dosage can be reduced even further than that recommended earlier.<sup>1</sup> Now, clinical evidence has established that a single (0.5 Gm.) tablet maintains therapeutic blood levels extending beyond 24 hours. Still more proof that KYNEX stands alone in sulfa performance—

- Lowest Oral Dose In Sulfa History—0.5 Gm. (1 tablet) daily in the usual patient for maintenance of therapeutic blood levels
- Higher Solubility—effective blood concentrations within an hour or two
- Effective Antibacterial Range—exceptional effectiveness in urinary tract infections
- Convenience—the low dose of 0.5 Gm. (1 tablet) per day offers optimum convenience and acceptance to patients

## NEW DOSAGE

The recommended adult dose is 1 Gm. (2 tablets or 4 teaspoonfuls of syrup) the first day, followed by 0.5 Gm. (1 tablet or 2 teaspoonfuls of syrup) every day thereafter, or 1 Gm. every other day for mild to moderate infections. In severe infections where prompt, high blood levels are indicated, the initial dose should be 2 Gm. followed by 0.5 Gm. every 24 hours. Dosage in children, according to weight; i.e., a 40 lb. child should receive  $\frac{1}{4}$  of the adult dosage. It is recommended that these dosages not be exceeded.

### Tablets:

Each tablet contains 0.5 Gm. (7½ grains) of sulfamethoxy-pyridazine. Bottles of 24 and 100 tablets.

### Syrup:

Each teaspoonful (5 cc.) of caramel-flavored syrup contains 250 mg. of sulfamethoxy-pyridazine. Bottle of 4 fl. oz.

<sup>1</sup> Nichols, R. L. and Finland, M.: J. Clin. Med. 49:410, 1957.

LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK

\*Reg. U. S. Pat. Off.



**IMPORTANT  
NEW  
PRODUCT**

promising approach to:  
hyper-betalipoproteinemia  
hyper-cholesterolemia  
hyper-chylomicronemia,  
and other  
abnormal serum lipids  
and  
**atherosclerosis**

**lufa**  
CAPSULES

**Lipotropic factors with  
Unsaturated Fatty Acids (safflower oil)**

**a balanced formula for modifying, preventing  
or correcting atherogenic factors widely  
implicated in causing coronary thrombosis.**

380

340

320

290

270

clinical studies demonstrate that

**lufa\*** CAPSULES

effectively help to

shift atherogenic  
beta-lipoproteins  
to the more normal  
alpha-lipoproteins

by means of well tolerated  
vegetable unsaturated fatty acids

reduce elevated blood  
cholesterol levels

normalize chylomicron-  
lipomicron ratios

with choline, methionine,  
pyridoxine (B<sub>6</sub>) and  
other lipotropics

stabilize function of  
the liver, site of  
normal metabolism of  
cholesterol, lipoproteins  
and other lipids

Each LUFA capsule provides:

UNSATURATED FATTY ACIDS**	378 mg.
PYRIDOXINE HCl (B <sub>6</sub> )	2 mg.
CHOLINE BITARTRATE	233 mg.
DL, METHIONINE	110 mg.
INOSITOL	40 mg.
DESICCATED LIVER	87 mg.
VITAMIN B <sub>12</sub>	1 mcg.
VITAMIN E (dl, alpha-tocopheryl acetate)	3.5 I.U.

\*\*from specially  
refined safflower  
seed oil. Provides  
approximately 294 mg.  
of linoleic acid.

**dosage:** Therapeutic dose, 6 to 9 capsules, in divided doses with meals, or more as needed. Maintenance dose, one LUFA capsule t.i.d. with meals.

**supplied:** Bottles of 100, 500 and 1000 capsules.

Samples, literature and diet charts for patients on request.

**u. s. vitamin corporation • PHARMACEUTICALS**

(Arlington-Funk Laboratories, division)

250 East 43rd Street • New York 17, N. Y.

\*Best results are obtained when LUFA is given as an adjunct to a diet adequate in protein, low in animal fat and moderate in fats from selected vegetable and marine sources.

# AMA News Notes

---

## CIVIL DEFENSE MEETING

The eighth annual County Medical Societies Civil Defense Conference was held November 9-10 at Chicago's Morrison Hotel. Sponsored by the AMA Council on National Defense, the Conference helped local medical and health personnel plan their roles in disaster and civil defense emergencies. Congresswoman Martha W. Griffiths of Michigan reported on the status of national civil defense legislation which received considerable attention during the first session of the 85th congress. Mrs. Griffiths is a member of the House Committee on Government Operations and its Subcommittee on Military Operations.

Another highlight of the Conference was reports on the experience gained through several test operational exercises conducted under simulated disaster conditions, including a critique of the national exercise "Operation Alert."

Additional reports were given on such subjects as general preparedness planning, hospital operational preparedness, the role of the county medical society, radiological aspects of radiation fallout, the AMA-FCDA study project, the AMA program on Asian influenza. The group broke up into small sections to discuss specific problems.

## AMA COMMITTEE MEETINGS

Two committees of the AMA Council on Medical Service plan regional meetings Monday, December 2, in Philadelphia just prior to the AMA's eleventh Clinical Session. *The Committee on Maternal and Child Care*—first regional meeting on perinatal mortality and morbidity. Invitations are being sent to members of maternal and child care committees in Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia. *The Committee on Aging*—third regional conference for members of state committees on aging. Subjects to be discussed include physical examinations and a health maintenance program, guides for the organization and operation of medical society committees on aging, medical education in caring for the aged, preretirement counseling, and special research programs of a medical school.

Physicians interested in attending either of these sessions should contact the Council for further details.

## MEDICAL EDUCATION CONGRESS

Problems confronting medical education in the rapidly changing scene will be the main topic of concern at the 54th annual Congress on Medical Education and Licensure February 9-11. Sponsored by the AMA Council on Medical Education and Hospitals, the Federation of State Medical Boards of the United States and the Advisory Board for Medical Specialties, the Congress will be held at the Palmer House, Chicago.

The conferees will view medical education's broad potential in the light of four factors—the changing characteristics of the nation's population, sociological trends, economy and medical knowledge—and the implications of these factors on medical education, medical research and medical care.

In addition, four workshop committees—composed of representatives from the AMA, the Council, the AAMC, higher education, government, business, insurance, labor and agriculture—will discuss various problem areas, endeavor to clarify questions that need to be raised and recommend possible ways that medicine can assume the leadership in solving these problems. The committees' reports will be presented before the entire Congress for discussion from the floor.

On Monday morning, February 10, the Council will conduct its annual co-sponsored meeting with the Advisory Board. This session will be devoted principally to discussions of problems in graduate medical education created by the changing status of the patient and the role of the community hospital in graduate medical education. The Federation will hold its second examination institute on Saturday, February 8, and its regular meeting on Tuesday, February 11.

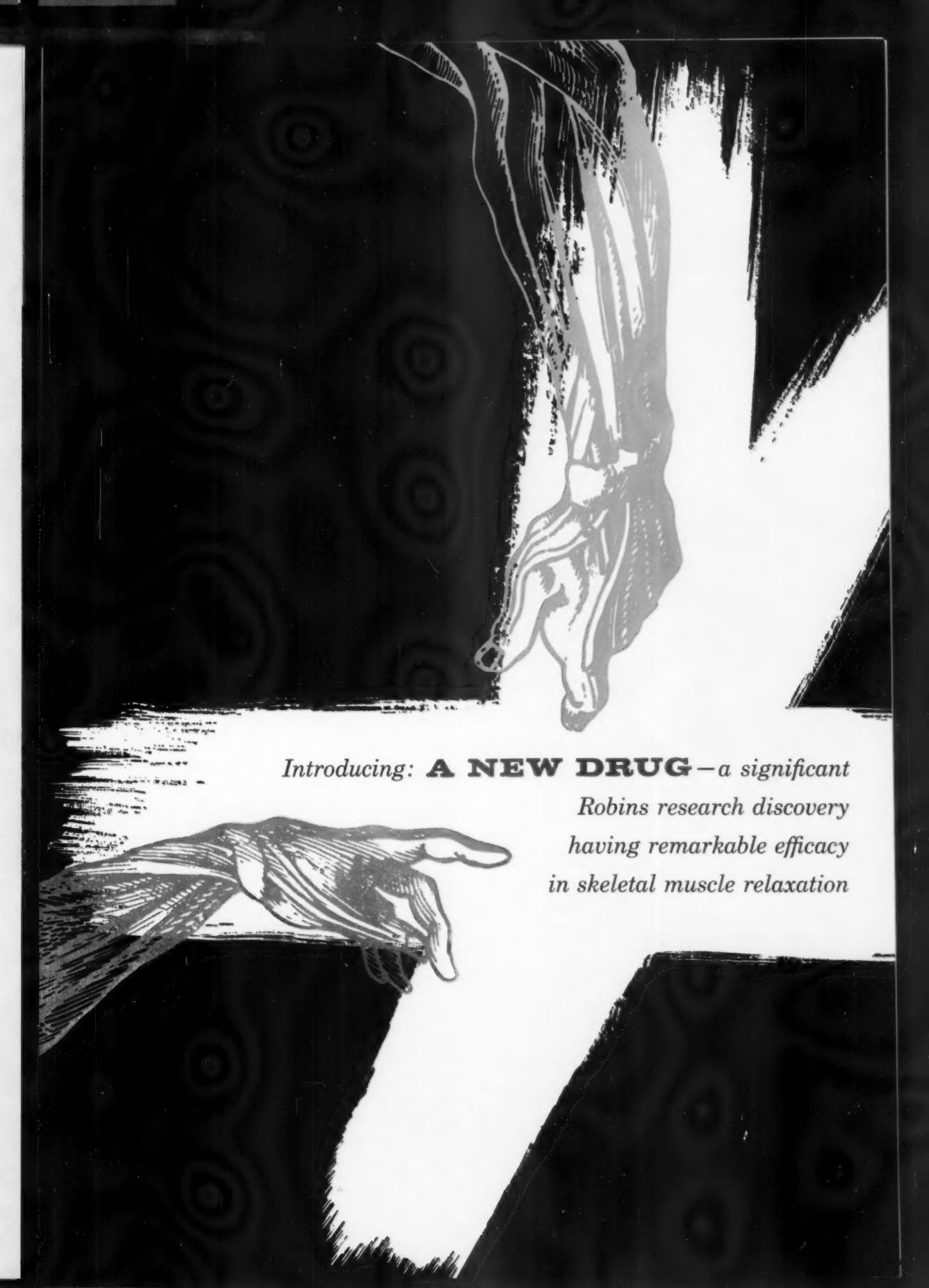
## CANCER FILM BOOKINGS THROUGH AMA

Hope in the thought that 75,000 lives in America need not be lost needlessly to cancer each year is the theme of a dramatic educational film recently added to the AMA Film Library. Titled "The Other City," the film stresses the encouraging fact that doctors currently are saving one in three patients as compared with a previous one-in-four ratio. Setting of the film is Racine, Wisconsin. Four basic thoughts are developed: (1) Racine empty and lifeless; (2) a symbolic representation of what cancer is; (3) how the 75,000 inhabitants of this token city could have helped save themselves, and (4) Racine alive and bustling.

Produced by the American Cancer Society, the 16mm color film runs 22 minutes and 30 seconds. It is suitable for showings on local television as well as for church, club and school gatherings. Medical societies may book the film through the AMA Film Library.

## RESEARCH FOUNDATION ESTABLISHED

The American Medical Research Foundation recently was established by the AMA. Principal purposes of the Foundation will be: (1) to promote the betterment of public health through scientific and medical research; (2) to plan and initiate scientific and medical research, and (3) to collect, correlate, evaluate and disseminate results of scientific and medical research activities to the general public. Voting members of the Foundation will be AMA trustees. Meetings will be held annually at the time of the AMA Annual Sessions.



Introducing: **A NEW DRUG**—a significant  
Robins research discovery  
having remarkable efficacy  
in skeletal muscle relaxation

Significant **Robins** research discovery:

*a highly efficient skeletal muscle relaxant*

# Ro

ROBAXIN – synthesized in the Robins Research Laboratories, and intensively studied for five years – introduces to the physician an entirely new agent for effective and well-tolerated skeletal muscle relaxation. ROBAXIN is an entirely new chemical formulation, with outstanding clinical properties:

- Highly potent and long acting.<sup>5,8</sup>
- Relatively free of adverse side effects.<sup>1,2,3,4,6,7</sup>
- Does not reduce normal muscle strength or reflex activity in ordinary dosage.
- Beneficial in 94.4% of cases with acute back pain due to muscle spasm.<sup>1,3,4,6,7</sup>





# baxin<sup>®</sup>

(Methocarbamol Robins, U.S. Pat. No. 2770649)

## *Highly specific action*

ROBAXIN is highly specific in its action on the internuncial neurons of the spinal cord — with inherently sustained repression of multisynaptic reflexes, but with no demonstrable effect on monosynaptic reflexes. It thus is useful in the control of skeletal muscle spasm, tremor and other manifestations of hyperactivity, as well as the pain incident to spasm, without impairing strength or normal neuromuscular function.

## *Beneficial in 94.4% of cases tested*

When tested in 72 patients with acute back pain involving muscle spasm, ROBAXIN induced marked relief in 59, moderate relief in 6, and slight relief in 3 — or an over-all beneficial effect in 94.4%.<sup>1,3,4,6,7</sup> No side effects occurred in 64 of the patients, and only slight side effects in 8. In studies of 129 patients, moderate or negligible side effects occurred in only 6.2%.<sup>1,2,3,4,6,7</sup>

### CLINICAL RESULTS WITH ROBAXIN IN ACUTE BACK PAIN<sup>1,3,4,6,7</sup>

Disease entity	No. of Cases	Duration of Treatment	Dose per day (divided)	Response				Side Effects
				Marked	Mod.	Slight	Neg.	
Acute back pain due to								
(a) Muscle spasm secondary to sprain	18	2-42 days	3-6 Gm.	17	1	0	0	None, 16; Dizziness, 1; Slight nausea, 1.
(b) Muscle spasm due to trauma	13	1-42 days	2-6 Gm.	8	1	3	1	None, 12; Nervousness, 1.
(c) Muscle spasm due to nerve irritation	5	4-240 days	2.25-6 Gm	4	1	0	0	None, 5.
(d) Muscle spasm secondary to discogenic disease and postoperative orthopedic procedures	30	2-28 days	1.5-9 Gm.	24	3	0	3	None, 25; Dizziness, 1; Lightheadedness, Nausea, 2.*
Miscellaneous (bursitis, torticollis, etc.)	6	3-60 days	4-8 Gm.	6	0	0	0	None, 6.
<b>TOTAL</b>	<b>72</b>			<b>59</b>	<b>6</b>	<b>3</b>	<b>4</b>	

\*Relieved on reduction of dose



**NOW**

*a highly specific skeletal muscle relaxant...*

# Robaxin<sup>®</sup>

(Methocarbamol Robins)



This new drug—for use in the control of skeletal muscle hyperactivity in many disease states manifesting neuromuscular dysfunction—is available NOW on your prescription at all leading pharmacies. Informational literature is available on request.

## *Indications:*

Acute back pain associated with: (a) muscle spasm secondary to sprain; (b) muscle spasm due to trauma; (c) muscle spasm due to nerve irritation; (d) muscle spasm secondary to discogenic disease and postoperative orthopedic procedures; and (e) miscellaneous conditions such as bursitis, torticollis, and related conditions.

## *Dosage:*

**ADULTS:** 2 tablets 4 times a day to 3 tablets 6 times a day.

**CHILDREN:** Total daily dosage 270 to 335 mg. per 10 pounds of body weight, adjusted for age and weight, and divided into 4 to 6 doses per day.

## *Supplied:*

ROBAXIN Tablets (white, scored), each containing methocarbamol [3-(o-methoxyphenoxy)-2-hydroxypropyl-1-carbamate], 0.5 Gm. Bottles of 50.

## *References:*

1. Carpenter, E. B.: Publication pending.
2. Carter, C. H.: Personal communication.
3. Forsyth, H. F.: Publication pending.
4. Freund, J.: Personal communication.
5. Morgan, A. M., Truitt, E. B., Jr., and Little, J. M.: J. American Pharm. Assn. 46:374, 1957.
6. Nachman, H. M.: Personal communication.
7. O'Doherty, D.: Publication pending.
8. Truitt, E. B., Jr., and Little, J. M.: J. Pharm. & Exper. Therap. 119:161, 1957.

*A. H. ROBINS CO., INC., Richmond 20, Virginia*

for "This Wormy World"



*Pleasant tasting*

**'ANTEPAR'**®  
brand

PIPERAZINE

**SYRUP • TABLETS • WAFERS**

*Eliminate* **PINWORMS IN ONE WEEK**  
**ROUNDWORMS IN ONE OR TWO DAYS**

**PALATABLE • DEPENDABLE • ECONOMICAL**

**'ANTEPAR' SYRUP** - Piperazine Citrate, 100 mg. per cc.

**'ANTEPAR' TABLETS** - Piperazine Citrate, 250 or 500 mg., scored

**NEW** **'ANTEPAR' WAFERS** - Piperazine Phosphate, 500 mg.

*Literature available on request*



**BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N. Y.**

## What They Thought About the 1957 MSMS Annual Session

**Leon Goldman, M.D., Cincinnati** (guest essayist): "I wish to thank you for the many courtesies and privileges extended to me at the recent meeting of the Michigan State Medical Society. I have been to a number of meetings, both as guest and just as a relaxed bystander, but I have never seen such efficient organizational details as I have seen you all do. This was a real lesson in administration for us who conduct meetings from the time of the initial invitation until the time when the guest is tucked away on his plane or train. I feel I have really learned a lot about administration, and I am very grateful. Thank you again."

**Theodore Winship, M.D., Washington, D. C.** (guest essayist): "My visit to Grand Rapids was most enjoyable and I found the audience unusually responsive and courteous."

**Samuel Bellet, M.D., Philadelphia** (guest essayist): "Thank you very much for inviting me to participate in this symposium and I certainly appreciate the courtesies you showed me."

**Paul A. Bowers, M.D., Philadelphia** (guest essayist): "I wish to take this opportunity to express my appreciation to the members of the Michigan State Medical Society for the very cordial reception which I received during your recent meeting."

**Keith Hammond, M.D., Paoli, Ind.** (Councilor, Indiana State Medical Association): "I would like to take this opportunity to thank you for the gracious way in which we were attended and entertained during our recent visit in Grand Rapids at the meeting of the Michigan State Medical Society. Our stay was a most pleasant one."

**Wm. S. Reveno, M.D., Detroit** (Chairman, MSMS Preventive Medicine Committee): "Word comes to me of the superb show you put on at Grand Rapids. I'm not surprised—because that's what I expected."

**J. Raymond Knighton, Executive Secretary, Christian Medical Society, Chicago**: "I would like to express our appreciation for the privilege of exhibiting at the recent MSMS meeting in Grand Rapids. Although we have been exhibiting at many medical meetings over the past few years, it is the consensus that the response we received at this meeting was as good, if not better, than any previous exhibit. We would also like to commend you on the very efficient handling of the exposition by your Executive Director, William J. Burns. Mr. Burns and staff co-operated most effectively to make our exhibit efficient and profitable."

**William N. Smith, S. E. Massengill Company, Bristol, Tenn.**: "Just a note to say how much I enjoyed attending the MSMS convention last week. This meeting was one of the best organized conventions I have attended. You certainly deserved the standing ovation for a job much more than 'well done.'"

**L. G. Dickson, Secretary, Class of 1959, Wayne State University College of Medicine**: "On behalf of myself and my classmates, who joined me as guests at the recent MSMS convention in Grand Rapids, may I thank you for the opportunity you offered us. We certainly appreciated this chance to attend the meeting and exhibition. Medical students certainly welcome such an educational experience offered in so generous a spirit. My attendance at this convention, in all respects, has been a valuable addition to my medical education."

**Leo H. Bartemier, M.D., Baltimore** (guest essayist): "It was pleasant to see all you folks again, even for a brief moment."

**Peter C. Kronfeld, M.D., Chicago** (guest essayist): "I enjoyed the Michigan State Medical Society Meeting very much."

**Adelaide M. Johnson, M.D., Rochester, Minnesota** (guest essayist): "I found the meetings stimulating and very much enjoyed participating. The audience was the responsive kind that is very gratifying to the speaker."

**James W. Burks, Jr., M.D., New Orleans** (guest essayist): "I should like to express my appreciation for the honor bestowed upon me in having me participate in your recent meeting in Grand Rapids, and to thank you for making my effort a pleasant one. Your hospitality was very much appreciated."

**Edward Press, M.D., New York** (guest essayist): "I am glad to be of help at your meeting and would like to commend you on how smoothly and efficiently run the session was. I appreciate the hospitality extended to me at your meeting."

**Hans H. Hecht, M.D., Salt Lake City** (guest essayist): "I certainly appreciated the courtesy of your invitation and the wonderful reception that I received in Michigan."

**Charles Morrill, Secretary, Class of '59, University of Michigan Medical School**: "I want to take this opportunity to thank the Michigan State Medical Society for the privilege of attending the meetings of the House of Delegates. It was certainly enlightening to be able to see the policy-making body of the medical profession of Michigan in action."

"One can now appreciate that there will be many problems concerning us as future physicians aside from knowing and putting into practice medical knowledge. We should now be able to expand our Student American Medical Society to make certain that our educational program trains the 'whole' doctor and not just the 'technical' doctor, important as this is."

"I sincerely appreciate the accommodations that were provided and hope that other students may be able to attend future MSMS conventions. Thank you."

Albert V. Whitehall, Vice Chairman, Health Insurance Council, New York: "This is belated appreciation of your hospitality at your recent meeting and to compliment you on its success. Two things stood out to me. The effectiveness of Hugh Brenneman for the tremendous public relations impact of your program. He is a real pro. Second was the efficiency of your staff in handling registration. It reminded me of a warm-hearted, cordial IBM machine and seemed to have just the friendly touch that could be traced right back to one Bill Burns."


Kieffer Davis, M.D., Bartlesville, Oklahoma (guest speaker): "Thank you and many of your fellow workers in the Michigan State Medical Society for making my visit in Grand Rapids quite a delightful one. I don't know when I have ever been treated quite so royally."

E. W. Schoenheit, M.D., President of the Medical Society of the State of North Carolina (guest): "I wish to express my grateful appreciation to you and to the Michigan State Medical Society Members for their hospitality, and for the kind administration to me during my Michigan stay. I take this opportunity to tell you what a pleasure it was to see you and how much I enjoyed being at the MSMS meeting."

John D. Porterfield, M.D., Washington, D. C. (guest essayist): "I appreciated very much the opportunity to speak both at the General Assembly and before the Preventive Medicine Section, and thoroughly enjoyed the opportunity to talk with Michigan Physicians during the informal hours. I must say to you truly that I have never been more graciously hosted at any other medical meeting."

Paul K. Danielson, Kansas City, Missouri (exhibitor): "I would like to compliment you on the very efficient and effective way in which the Michigan State Medical Society 1957 Annual Session and Exhibit at the Civic Auditorium in Grand Rapids was conducted. I have made medical meetings in almost every state and without a doubt, yours is tops."


Thomas H. Alphin, M.D., Washington, D. C. (Washington Office of American Medical Association): "It was a great pleasure to be present on such a momentous and auspicious occasion and of course it is always a privilege to see a well organized state medical society in operation. Democracy may be taking a beating in many areas but it certainly stands foursquare in Michigan medical circles. Considering the strong winds and storms of your area that is a notable achievement."



**NOSE COLD**      **HEAD COLD**      **ASIATIC FLU**

# PHENAPHEN<sup>®</sup> PLUS

Phenaphen Plus is the physician-requested combination of Phenaphen, plus an antihistaminic and a nasal decongestant.



each coated tablet contains: <b>Phenaphen</b>	
Phenacetin (3 gr.) . . . . .	104.0 mg.
Acetylsalicylic Acid (2½ gr.) . . . . .	162.0 mg.
Phenobarbital (¼ gr.) . . . . .	16.2 mg.
Hyoscyamine Sulfate . . . . .	0.031 mg.
<b>plus</b>	
Propenpyridamine Maleate . . . . .	12.5 mg.
Phenylephrine Hydrochloride . . . . .	10.0 mg.

Available on prescription only.



**when infection  
strikes the respiratory tract...**

# ILOTYCIN

(Erythromycin, Lilly)

**provides singularly effective antibiotic  
therapy because**

*Dosage: The usual adult  
dose is 250 mg. every six  
hours.*

*Available in specially  
coated tablets, pediatric  
suspensions, drops, otic  
solution, ointments, and  
I.V. ampoules.*

- Virtually all gram-positive organisms are sensitive
- Allergic reactions following systemic therapy are rare
- Bactericidal action kills susceptible organisms
- Normal intestinal flora is not appreciably disturbed

ELI LILLY AND COMPANY • INDIANAPOLIS 6, INDIANA, U. S. A.

THE 150

# The JOURNAL

*of the Michigan State Medical Society*

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOLUME 56

NOVEMBER, 1957

NUMBER 11

## The Physician and City Commissions

By L. A. Drolett, M.D.  
Lansing, Michigan

MY INTEREST in the fire department stems from my youth. It has always seemed to me the most interesting business in the world. By appointment of the mayor, I have been a member of the Board of Police and Fire Commissioners of Lansing for the past sixteen years. The eight to ten hours a month given to this project are a donation which I feel that I owe to my community.

The commission is made up of nonsalaried citizens who donate their time and services to the governing of these two departments. A physician on this board has a splendid opportunity to exchange ideas with laymen and to glean an insight into men's reactions under extreme pressure and tension. The emotional status, physical stature, sincerity of purpose, and intelligence of candidates must be evaluated by committee members of the board. As a doctor, I find my medical training of great assistance in choosing men for these departments.

Several years ago it came to my attention, as a result of complaints by the fracture committee of the American College of Surgeons, that people involved in accidents on the street were being badly manhandled by ambulance crews. Fractures were being compounded by injudicious handling. After some study of the problem in various cities throughout the country I came to the conclusion that perhaps the fire department should handle ambulance equipment rather than the police.

Dr. Drolett is Commissioner of the Police and Fire Departments of Lansing, Michigan.

They had more time to take the necessary training. So, in spite of considerable protest, this transfer was made. More modern equipment was added to the ambulance, splints and an inhalator were supplied, sterile dressings, cots, and even a physician's bag were installed.

Forty firemen were trained by me to operate this ambulance. They were trained in the use of the inhalator, in proper splinting, and other first aid measures. Later, a second ambulance was added to the department and, today, all street accidents within the city limits are responded to by city ambulances. The patients from street accidents are splinted on the scene and any wounds are sterilely dressed, bleeding is controlled by intelligently applied tourniquets, and patients are transported to the hospitals in good condition, compared to the rough and ready old days. In addition, these keenly trained men make many inhalator call runs in the community taking orders from the doctor who is called simultaneously.

The public has come to recognize this service and appreciate the dollar value of this training and equipment, and many other cities have adopted a similar fire department ambulance service.

Our commission has insisted on both the fire and police departments using the facilities of Michigan State University and various federal schools in Washington and Memphis, Tennessee. Numerous police and firemen have been sent to these schools at city expense to return and pay rich dividends with the knowledge gained. Recently, at the request of the Federal Bureau of Narcotics, two

detectives were given twenty-one days of intensive training in Washington, D. C., in narcotic investigations. It has been amazing to watch these two men quietly at work in the city investigating complaints of local pharmacists. They have learned so much in such a short period of training. It is developing that the physician is quite frequently the greater violator in careless prescribing of narcotics and too often may be an addict himself.

Other officers are graduates of a ninety-day training period at the FBI school in Washington, and are used as instructors in addition to their regular duties of investigation of crime.

As a senior member of our commission, I am proud of the fact that our departments are becoming more highly skilled and efficient and are rapidly becoming professionalized with highly trained technicians, able to render the best possible service for the tax dollar.

The police and fire departments are obviously our first line of defense in case of local disaster, such as tornado, catastrophic fire, or enemy attack. With this in mind, a process of emergency training has been set up to coördinate with the doctors of the community. These departments must be ready immediately to undertake first aid that might take hours for the civil defense authorities to take over. The Ingham County Medical Society has equipped three emergency field trunks; one is kept in each of the hospitals and one in the central fire station. These trunks are kept in excellent condition under the supervision of command officers of the depart-

ment. They are stocked with plasma, sterile dressings, tourniquets, surgical instruments, and any equipment that we feel can be used to set up a portable field hospital at the scene of disaster. The firemen constantly check this equipment and maintain it for immediate use.

In the activities of the fire department today, perhaps more than at any other time, the personnel are being called upon to deal with noxious gases and fire hazards that were nonexistent ten to fifteen years ago. The men must be educated and trained to cope with these situations in order to survive. In accepting this training, it is interesting to note that the men are eager and willing to learn more about their jobs. Undoubtedly, this attitude stems from the commission's insistence on advanced training for the men in the department. The men in the police department have likewise steeled themselves to cope with the extreme violence of crime as it exists today. Many "fight calls" result in the apprehension of individuals who will kill on very little provocation.

My sixteen years of service to the community on the Police and Fire Commission have been gratifying to me. I feel very keenly that it is every physician's duty not only to render service to his profession but in some way to try and add his bit to community effort. If he does, he will gain the confidence of the public and express to the people that we are interested not only in their physical well-being but also in their community welfare.

## STATEMENT OF PRINCIPLES BETWEEN PHYSICIANS AND LAWYERS

*(Continued from Page 1378)*

other full courtesies and amenities and engage in a mutual understanding of the problems of each other.

2. It is required that the attorney understand the vast demands made upon the time of the members of the medical profession, and at all times to avoid unnecessarily claiming the time of any physician either in the attorney's preparation of the case for trial, or while engaged in the trial of the case.

3. It likewise is required that the physician understand that in many instances, the legal rights of the patients, in litigation having medical aspects, may be properly protected only by the attorney seeking and obtaining the time and services of the physician in the preparation and trial of the case.

4. Courtesy requires, where necessary, that the attorney assist and enlighten the physician with respect to his position as a witness on the trial of the case, his role as a witness, and the rules to be observed in connection with the matter of giving testimony in court.

5. Courtesy requires of the physician that he aid the attorney so that the attorney may be enlightened on the highly specialized medical aspects of the case, and

may be assisted in properly presenting on the trial of the case the medical phases involved through sufficient understanding with the physician to conduct an intelligent examination of the physician witness.

6. Courtesy requires that the attorney co-operate with the physician to minimize as far as practicable the time required for the physician to remain in court.

7. If an attorney plans to have a subpoena served upon a physician, wherever practicable, the physician should be notified in advance and service made under arrangements convenient and acceptable to the physician.

8. Courtesy requires that wherever practicable, the attorney and physician should consult in advance with reference to the fee of the physician to be charged for his time spent in attendance in court as a witness.

9. Courtesy requires that where, by requirement of statute, the amount of an expert's fee may be set only by the court, the physician be notified thereof in advance, with the further assurance of the attorney that he will petition the court, at the proper time, for an order setting a proper and reasonable fee for the physician's services as an expert witness.

# The Doctor and the Service Club

By T. E. Schmidt, M.D.  
Jackson, Michigan

**Y**OU'RE no "joiner." You're too busy, but you accept the invitation to attend a service club luncheon meeting just to please the guy. Said he'd have you back by 1:45.

There's a lot of jovial milling around and friendly banter. Everybody wears an absurdly huge luncheon badge. Calls each other by his first name. Seems nice. Nobody has a board up his back.

The membership startles you. Almost everyone is head of some important business. You're introduced around and, as you sit down, you look the room over and find most of the leaders in the community present. Table conversation is refreshingly free from professional matters. You're surprised to find you are having a good time in very congenial company.

After the meal, a couple of lively songs. Some sing a bit off-key, but no matter. You join in. They really go all-out on "Smiles"—a favorite.

You're amazed at the guests. They're from all over. Most of them from nearby clubs, but there's one from Melbourne, Australia, and one from Upsala, Sweden, on a business trip to this country, but they keep up their attendance standing by attending meetings here. You're told this service club has over 9,500 clubs in 104 countries. More countries than belong to the U.N. Over 400,000 business and professional men belong to this international organization. Over 10,000 usually attend the international conventions held annually. Must be quite an experience. Meeting men from all over the world. You wonder what attracts so many busy men into the service club movement.

You begin to suspect that this is more than a luncheon club on hearing a few brief committee reports—members transporting sixty crippled children to a summer camp supported by the club, a progress report on city planning and slum clearance initiated by the club, commitments obtained from local concerns to furnish leadership and sponsor fifteen Junior Achievement groups, an experience in private enterprise for youngsters. Dr. Sams, whom you well know to be a friend to all young doctors (he helped you when

you first began practice), reports that his committee is going to enlarge the playground and youth center which the club sponsors. Dr. Sams carries a heavy professional schedule, is active in medical affairs and has done much to encourage high ethical standards in your profession. You learn that he is a past president of the club and is very active in community affairs. An all-around citizen.

You're told that seven of the club's twenty-odd committees are hard at work on various community projects. The genuine enthusiasm shown in community work by these men impresses you. It's something they call "community service." Has nothing to do with their occupations.

It's time for the speaker. He's a lad in his twenties. Most of the members are old enough to be his father. But they listen attentively. He is just back from a year's graduate study in Italy. A clean-cut fellow. You're intrigued by his first hand knowledge and keen interpretation of the social, political and economic problems and customs of the Italian people. He bespeaks his gratitude to the members of the service club in Padova who opened their homes to him, the friendly courtesies, the numerous opportunities to speak to clubs about our own country and our way of life. You are experiencing not a mere vicarious adventure in foreign travel but an adventure in international friendship and understanding—a true ambassador of goodwill.

From the president's remarks you gather that this fine young man is one of some 130 carefully chosen young men and women from thirty-odd countries who have spent this year in a foreign land, sponsored by their home clubs through a three million dollar foundation financed by member clubs of this organization. Over six hundred such fellows have been sponsored by the foundation. Many are now filling important posts in their homelands and are still ambassadors of friendship between nations. It is one of many club projects in what is called "international service."

*(Continued on Page 1396)*

# The Doctor and the School Board

By Warren B. Cooksey, M.D.  
Detroit, Michigan

IT WAS thirty years ago this past July that I began my active medical practice. Early in those first years of practice, I made a strong resolve that I would try and spare some energy and time in an effort to be a good citizen as well as a good physician. I have not regretted this resolve for it has led me into some fields of usefulness and enjoyable friendly relationships that I cherish a great deal. It was apparent to me very early in some of my community responsibilities that there were too few doctors willing to devote some time to such things as the Community Chest, Social Services, and the Red Cross, and in such gatherings it was, and still is, a stirring experience to me to see how extremely welcome the presence of a physician in such committee meetings and endeavors can be. I can honestly say that many times in the past years, I have witnessed an absolute yearning on the part of citizen groups for the opinion and judgment of a physician member, and I do, indeed, feel that we physicians have a very great responsibility and obligation to help support, as much as our energy and talents permit, the various enterprises and philanthropies that make a community truly great.

I am sure that in all the activities in which I have participated, no experience has been quite the same challenging situation as that which I found when I was appointed to the Detroit Board of Education to replace the late Douglas A. Jamieson. I have found that at many points the physician, by background and training, can be useful in the conduct of the affairs of public education. There are indeed all sorts of human relationships that a school board must deal with very carefully, such as those related to emotional adjustments,

racial problems, traumatic accidents, and personnel situations. We, as physicians, are constantly analyzing factual data in order to come to a proper conclusion, and such problems as teacher retirement, salary adjustment, building costs, vocational training and guidance, curriculum, teacher and classroom shortages, to mention only a few, require the kind of mind that a physician must cultivate in order to practice medicine successfully.

I think it is inherent in the well-trained physician to adopt a *careful conservative* attitude toward life's situations and nowhere could such a background serve one in good stead better than serving on an active Board of Education, especially in a large school system such as Detroit. We physicians have had considerable opportunity by training and experience to acquire ability in public speaking and working under the glare of public opinion. The necessity of performing one's duties in open meetings with the ever present public press, and of carefully scrutinizing one's every word, is a situation it seems to me in which wide medical training and experience is a great asset indeed. It is my further observation that no finer group of people can be found in any community than those concerned with the training of our youth. I must say that I have enjoyed immensely my service on the Detroit Board of Education and I hope and believe I have at times been useful in solving some of the problems which we have faced. It seems undeniable to me that the finer the education provided our youth, the more certain it becomes that we will have happy and prosperous communities for the future. Whenever opportunity offers, therefore, I would urge physicians to participate actively in matters of public education.

---

## THE DOCTOR AND THE SERVICE CLUB

(Continued from Page 1395)

Acquaintance, fellowship, friendship, community service, business and professional ethics, friend and example to youth, international understanding and goodwill—these are some of the aims and objects of service club membership.

You're back at your desk at 1:45. You're no "joiner," but maybe this service club business is more than appears on the surface. You're at least convinced that this town is a better town because it has a service club.

# Use of Doxinate with Danthron as Withdrawal Therapy in the Treatment of Chronic Functional Constipation

Edmund S. Socha, M.D.  
Ionia, Michigan

IN 1955, Wilson and Dickinson<sup>12</sup> published an original report describing the usefulness of dioctyl sodium sulfosuccinate in the treatment of constipation. Since that time the results of a number of other studies with this drug have appeared in the literature.<sup>1,3,4,8,9,10,11</sup> Investigators have consistently found this substance to be an effective fecal softening agent. Animal experiments and extensive clinical observations failed to reveal any evidence of toxicity, probably because the agent is not appreciably absorbed.<sup>2,12</sup>

In the treatment of constipation, dioctyl sodium sulfosuccinate produces a soft stool, and in those cases where chronic functional constipation is due to hardening of the feces, the drug should result in correction of the condition.

Where fecal hardening is complicated by the presence of an atonic bowel musculature, it is obvious that fecal softening action alone may not be fully effective without adjunctive therapy. In fact, the lack of effectiveness of dioctyl sodium sulfosuccinate in this type of constipation has been pointed out.<sup>7</sup>

In cases of this latter type, the simultaneous administration of a mild peristaltic stimulant may be desirable to aid elimination of the softened stool. Since the sole purpose of this adjunct to fecal softening is to aid evacuation, the ideal agent would be one which acted solely on the lower bowel with the least possible irritating action. Danthron (1,8 dihydroxyanthraquinone) is a suitable agent for this purpose and its effectiveness and safety have been fully demonstrated.<sup>6</sup>

A preparation combining dioctyl sodium sulfosuccinate and Danthron is commercially available.\*

Dioctyl sodium sulfosuccinate exerts its effect by purely physical means. It reduces the interfacial

tension between the oil and aqueous phases of the heterogeneous material. It produces a softened and more homogeneous stool which is easier to evacuate. Unlike irritant laxatives, it obviates "rebound constipation." It eliminates the interference with absorption and the leakage often seen with mineral oil. It cannot cause "bloating" or impaction as can bulk laxatives.

It is apparent, therefore, that a combination of these two drugs would offer the advantages of easier movement and elimination of the fecal mass in chronic atonic constipation.

The problem of proper bowel management is an annoying one among the inmates of this reformatory. It may be due, at least in part, to the starchy food which constitutes a major portion of their diet; and to the fact that many of them have been taking cathartics more or less regularly even before entering the institution. The object of this study was to determine whether constipation could be corrected by the judicious use of dioctyl sodium sulfosuccinate and Danthron on a gradual withdrawal basis.

## Material and Method

Our study included seventy-four male patients (forty-four colored and thirty white) who ranged in age from seventeen to thirty years. All of these patients were institutionalized and were receiving a similar diet. Each patient was asked a series of questions concerning his use of cathartics before entering the institution. The frequency of use of cathartics, frequency of the daily bowel movement, and liking for particular types of food were ascertained. This latter factor we believe to be in large part responsible for the frequency of the constipation problem in patients who otherwise had not been dependent on laxation before entering the institution. A classification of these patients based on this information is shown in Table I.

The group included fifty-four patients who had

Dr. Socha is Institutional Medical Director of the Michigan Reformatory.

\*The combination used in this study was supplied as Doxinate with Danthron through the courtesy of Lloyd Brothers, Inc., Cincinnati, Ohio.

# CHRONIC FUNCTIONAL CONSTIPATION—SOCHA

TABLE I. CLASSIFICATION OF PATIENTS ACCORDING TO DIETARY HABIT, USE OF CATHARTICS AND FREQUENCY OF THE BOWEL MOVEMENT

Particulars	Number of Patients
<i>Dietary Habit</i>	
Mostly Starchy Food .....	44
Balanced Diet .....	30
<i>Use of Cathartics</i>	
Daily .....	6
2-3 times a week .....	34
Once a week .....	12
1-2 times a month .....	10
Occasionally .....	12
<i>Frequency of Bowel Movement</i>	
Daily .....	20
Every other day .....	40
Twice a week or less.....	14

been habitually taking some form of cathartic to induce a bowel movement. The remaining twenty patients had been using cathartics more or less regularly after their arrival at the institution. Considering the dietary preference of the individual patients, forty-four patients indicated a strong liking for starchy food such as bread, spaghetti or potatoes. Before starting the therapy, fifty-four patients were not having a bowel movement more often than every second or third day and had complained of frequent difficulty in the elimination of a hard stool.

All the patients included in this study, except seven who left the institution earlier, were treated for a period of eight weeks. Each patient was given one or two capsules of Dioxinate with Danthron on the first day together with 3 Dioxinate 60 mg. capsules. The same medication was given on the second and the third day, except that Dioxinate with Danthron was not given if the patient reported a satisfactory bowel movement following the therapy of the day before. On the fourth day, the patient was given only one capsule of Dioxinate with Danthron together with 3 Dioxinate 60 mg. capsules. In several cases, the use of Dioxinate with Danthron was not needed after the second or third day. On the following days, the number of Dioxinate 60 mg. capsules was gradually reduced from three to two to one each day, depending on the improvement in the regularity of the bowel movement of the patient. Where the bowel movement failed for two consecutive days, one capsule of Dioxinate with Danthron was given the next evening together with the Dioxinate capsules. All patients were given the medication by the attending nurse in person in their cells each day, and the response of the patient for the previous day was recorded at that time. Each patient

TABLE II. DURATION OF TREATMENT OF PATIENTS WITH DOXINATE AND DOXINATE WITH DANTHRON

Medication	Duration of Therapy	Number of Patients
Dioxinate	8 weeks	7
	7 weeks	3
	6 weeks	5
	5 weeks	16
	4 weeks	36
Dioxinate with Danthron	Less than 4 weeks	7
	During first 10 days	56
	Occasionally after 10 days:	
	1-5 days	8
Enema or Cathartics	6-10 days	8
	20-25 days	2
	During 8 weeks	0

TABLE III. TEMPORARY SIDE EFFECTS OBSERVED DURING THE TREATMENT OF CHRONIC CONSTIPATION WITH DOXINATE AND DOXINATE WITH DANTHRON

Patient Complaint	Number of Patients
Gas	19
Fullness	7
Cramps	7
Nausea	4
Headache	1

was given at least one Dioxinate 60 mg. capsule per day through a period of six weeks, though a majority of the patients were having a satisfactory daily bowel movement after being treated for four or five weeks. Few patients needed any further medication after the sixth week of therapy. The use of neither enema nor harsh cathartics was required during this treatment. These data are summarized in Table II.

## Results

During the first week of the therapy, we found that a certain amount of confusion existed in the minds of several patients with regard to their response to therapy. It was necessary to teach the patient that the object of treatment was a soft, "normal" stool rather than a violent purgation.

During this first week of therapy, we also noticed some complaints of loose stool, gas or fullness. One patient complained of headache and a few others of cramps or nausea. The data on such side effects are presented in Table III.

Soon after the first week of treatment, the patients' response became satisfactory and, as the treatment proceeded, their appreciation of the efficacy of the therapy increased. A majority of the patients were able to discontinue the use of the preparation containing Dioxinate with Danthron after the first week. Beyond this period, only a few patients were given one capsule of Diox-

inate with Danthron once every one or two weeks or even less frequently.

After four weeks of the treatment, a majority of the patients were found to be regular in their bowel habit and needed no further medication. However, Dioxinate therapy was continued through a minimum period of six weeks in all the patients by giving each patient at least one Dioxinate 60 mg. capsule per day. This was expected to provide a more lasting effect in the correction of the future bowel habit of the patient. Only ten patients continued to receive one Dioxinate 60 mg. capsule per day during the seventh week of the treatment, and this number was further reduced to seven patients who were using Dioxinate during the eighth week.

The overall satisfaction of the patients was excellent. There were no complaints of hard stools at the end of the treatment. All of the patients, except two, were very enthusiastic about the results which they had obtained from this therapy. They co-operated well in taking the prescribed therapeutic regimen. The two patients who insisted on the more frequent use of Dioxinate with Danthron in order to get a more satisfactory bowel movement had previously been using cathartics or enemas through most of their adult life. They simply failed to get psychological satisfaction without a purgative effect.

As a result of the correction in bowel habit, most of the patients reported that they were feeling better, several said that they were sleeping better, and some even gained weight. One patient who had been using cathartics each day for the past nine months and was not eating well, gained 20 pounds in weight during the period of treatment.

#### Discussion of Cases

Several case summaries from the group are of interest.

One ambulatory patient aged twenty-three, under treatment for chronic asthma, had a long-standing complaint of severe constipation. A variety of laxatives had been used, but catharsis commonly resulted in two or more prompt watery bowel movements followed by severe "rebound constipation." This patient received dioctyl sodium sulfosuccinate therapy without change in anti-asthmatic medication. The two medicaments were given at different times. He received 3 Dioxinate 60 mg. capsules per day for 12 days, reducing to two capsules per day during the following 12 days and to only one capsule per day for an additional one week.

As a result the patient had one or more bowel movements daily with soft consistency of the stool. No diarrhea or side effects were present. The patient was fully satisfied with the therapy and was effectively relieved of his constipation problem.

Another patient, aged twenty-six, was receiving 50 mg. of Chlorpromazine twice daily as a tranquilizer. He had a long-standing history of constipation and had taken different types of cathartics for most of his adult life. Constipation was effectively relieved by three Dioxinate 60 mg. capsules together with one Dioxinate with Danthron for the first day and two Dioxinate 60 mg. capsules per day for about one month.

A third patient, aged twenty-one, had a history of duodenal ulcer. He was receiving antispasmodic medication and a restricted diet. This patient complained of frequent constipation and could not tolerate cathartics. Treatment was carried out with 120 mg. of dioctyl sodium sulfosuccinate per day for a period of five weeks, administered separately from other medicaments. No side effects were present and the constipation was eliminated.

#### Summary and Conclusions

The therapeutic value of dioctyl sodium sulfosuccinate and its combination with 1,8-dihydroxyanthraquinone has been studied in a series of patients with chronic functional constipation. All of the patients were started on the combination therapy. In the mild and the moderate forms of chronic constipation, Danthron could be quickly withdrawn. In these cases, the subsequent use of dioctyl sodium sulfosuccinate alone was found to be quite effective in regulating the bowel habit of most of the patients. In the severe cases of chronic constipation, the occasional use of the preparation containing Danthron was continued through two to six weeks to obtain the most effective results. The need for enemas was eliminated. The fecal softening action was consistent and pronounced. No severe side effects or evidence of toxicity were seen. The patient co-operation in the acceptance of the therapeutic regimen was excellent.

This therapy did not interfere with the administration of other medicaments given at different times. The results of this study clearly indicate that the use of Danthron in combination with dioctyl sodium sulfosuccinate may be very effective when used as a withdrawal therapy in the management of the bowel habit of patients with chronic functional constipation.

(Continued on Page 1443)

# Tracheotomy: Indications and Comments

G. S. Fitz-Hugh, M.D., F.A.C.S.  
and W. C. McLean, M.D.  
Charlottesville, Virginia

ONE of us (G.S.F.)<sup>4,5,6</sup> has been interested in the various aspects of tracheotomy during the past twenty years. It has been observed that initially the procedure was performed in the vast majority of instances for the relief of obstruction in the upper respiratory tract at the laryngeal level, and that a good many (40 per cent) were performed in children two years old and younger. However, in recent years, there has been a tremendous increase in the scope and indications for tracheotomy, with more adults being the recipient of the procedure and fewer operations being performed for laryngeal obstructions. Much of the impetus to this development has been the result of the investigations and experience of Galloway,<sup>7</sup> Priest,<sup>11</sup> Bower,<sup>1</sup> Cummings,<sup>3</sup> and others.

We have devised a classification for the indications for tracheotomy, finding it useful in the presentation of the subject to those physicians not specifically interested in otolaryngology. Before discussing the subject further, the basic reason for tracheotomy, as far as we are concerned in this presentation, is to permit a normal exchange of air in the alveoli of the lung for the absorption of oxygen and the elimination of carbon dioxide, as so aptly stated by Harris.<sup>9</sup> Any serious interference with this mechanism will result in rapid death from asphyxia; or, if corrected just prior to this catastrophe, very possibly will result in irreversible nerve or other tissue damage with death secondary to complications therefrom. If survival ensues, one may anticipate embarrassment or some compromise in the efficient function of the human mechanism. Again, repeated episodes of subclinical hypoxia may result in tissue damage which may not be recognized in its early stages.

Returning to the question of classifications, four groups or categories are to be considered (Table I).

1. First are the patients who exhibit the manifestations of an impaired airway with hypoxia due

to a more or less fixed mechanical obstructive process, such as that encountered in a neoplasm, edema of the laryngeal mucosa, or abductor paralysis of the vocal cords. The degree of obstruction to the airway is usually so severe that tracheotomy is mandatory. Little question is raised regarding the necessity of the procedure. The development of hypoxia in this group is rapid and obvious, with dramatic relief resulting from the improved airway provided by the tracheotomy. This category will not be considered further in this presentation.

TABLE I. CLASSIFICATION OF THE INDICATIONS FOR TRACHEOTOMY

1. Fixed Obstruction to Upper Airway (Rapid obvious hypoxia)
2. Fluid Obstruction to Lower Airway (Slow obscure hypoxia and hypercapnia)
3. Prophylactic (To prevent 1 and/or 2)
4. Laryngeal Spasm?

2. In the second classification are the patients in whom the airway is compromised by fluid obstructions, resulting from the accumulation of excessive material in the tracheobronchial tree, secondary to aspiration of oral secretions, inflammatory exudation, congestive transudation, or hyperfunction of the secretory elements from any other causes. It is in this group that the development of dangerous hypoxia and asphyxia may be very slow, insidious and deceiving. Also, it is in this group that the presence of a normally functioning cough reflex and medullary respiratory center are essential. Further comments in regard to this will be forthcoming, as we are most interested in this class of patients in this presentation. The indications are not as clearly defined here as in the other categories, and more judgment must be demonstrated in deciding upon the need for tracheotomy.

3. The third group comprises those cases in which it is believed that the airway will be compromised by the conditions cited in indications one and two. Anticipating much difficulty, tracheo-

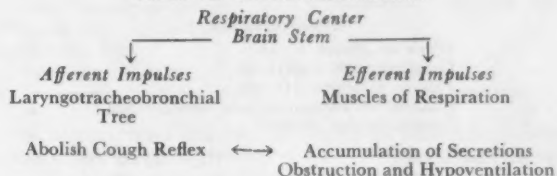
From the Department of Otolaryngology, University of Virginia Hospital, Charlottesville, Virginia.

Presented at the 91st Annual Session of the Michigan State Medical Society, Detroit, September 27, 1956.

tomy is performed as a preventative measure. An example would be a case of extensive surgery upon the head and neck for neoplasm. As in category one, no further comment will be made in this presentation in regard to this prophylactic group.

intercostal, and abdominal muscles responsible for the positive action of the reflex (Table II). The circuit may be interrupted at any one or more points along its pathways. For example, the medullary respiratory center may be so depressed by

TABLE II. COUGH MECHANISM

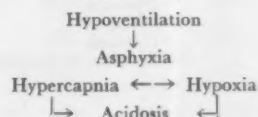


4. A fourth group and one which the existence thereof is questionable, will just be mentioned. Conceivably, tracheotomy may be necessary in the case of laryngeal spasm *per se*. We believe we have seen this in only one instance: a twelve-year-old girl with tetanus. We do know that in spasm superimposed upon an abnormal larynx as the result of inflammatory edema, neoplasm or such, tracheotomy has been necessary and usually with some degree of urgency.

So much for classification. As has been mentioned, in this presentation, we are interested in tracheotomy's being utilized for the second category of patients. It is in this group that there has been a noticeable increase in the incidence of tracheotomy, due to the realization of the benefits derived from this approach to cleansing the tracheobronchial tree of obstructing materials.

The need for tracheotomy in preventing local pulmonary and generalized systemic complications is predicated upon the failure of the cough reflex.<sup>14</sup> Any interruption in the proper function of this reflex is followed by an accumulation of secretions or other types of fluid material in the lower respiratory tract which, in turn, will lead to certain well-recognized local pulmonary and many less well-recognized complex systemic changes in the human mechanism. The cough reflex is mainly responsible for the elimination of fluids accumulated in excess in the laryngotracheobronchial tree, although movement of secretions by ciliary action plays a significant part. Sensory impulses of the reflex from the larynx, trachea, and lung, are transmitted by the vagus nerves to the co-ordinating medullary respiratory center, from whence the motor impulses are relayed to the relevant laryngeal, diaphragmatic, pulmonary,

TABLE III.



disease or even by excess CO<sub>2</sub> that it can no longer respond to the nerve impulses or to CO<sub>2</sub> stimulation. The muscles and nerves of the reflex may be rendered non-functional by trauma or disease. Once the patient is unable to cough efficiently, then one may expect an accumulation of nasal, oral, and pulmonary secretions with resulting deleterious pulmonary and systemic changes.

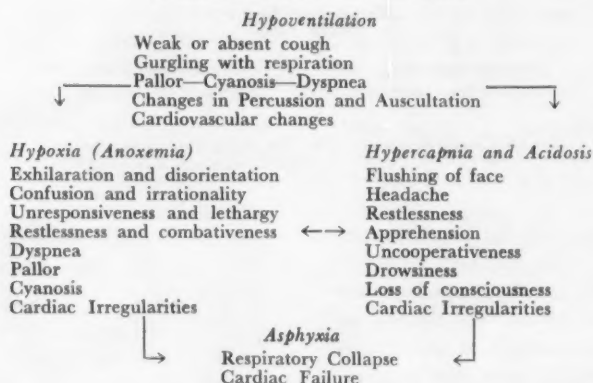
Obstruction of the tracheobronchial tree by secretory or foreign material, such as regurgitated food, predisposes to edema of the mucous membranes, further obstruction, atelectasis, infection secondary to stasis, and finally, to frank suppuration such as pulmonary abscesses. These are the readily recognized local conditions which may develop. There is another systemic condition which is related to the physiology of respiration.<sup>3,8</sup> With tracheobronchial obstruction, normal ventilation is impaired. Impairment in ventilation is initially mechanical in type. Inspired air does not adequately reach the alveoli; thus, sufficient oxygen does not reach the alveoli to pass into the blood by diffusion and, in turn, carbon dioxide present in blood is not adequately expired. This inadequacy leads to oxygen want or hypoxia, carbon dioxide retention or hypercapnia, then respiratory acidosis, and later, metabolic acidosis or acidemia. The combination of hypoxia, hypercapnia, and acidosis will lead to asphyxia (Table III).

The symptoms and signs of hypoxia and hyper-

capnia will be emphasized, for they may well be ascribed to, and confused with, the primary disease which has created the problem. Those of hypoxia are mental disturbances, which may be exhilaration, confusion, disorientation, irritation-

an oral or nasopharyngeal tube, and direct aspiration through an endotracheal tube or bronchoscope are methods which have been successfully utilized at times. However, when it is apparent that these measures will not suffice or be appli-

TABLE IV. SYMPTOMS AND SIGNS



ality, unresponsiveness, lethargy, and coma. Signs are restlessness, combativeness, dyspnea, pallo, cyanosis, and cardiovascular irregularities.

The symptoms and signs of hypercapnia and acidosis are much the same as those of hypoxia. Flushing of the face, headache, restlessness, uncooperativeness, apprehension, drowsiness, loss of consciousness and abnormal cardiac action are indicative of this carbon dioxide retention. Asphyxia with cardio-respiratory collapse is all too obvious, and is irreversible.

The need for the relief of obstruction of the type in the second category is determined better by clinical observations than by any laboratory means, though carbon dioxide combining power determinations may be helpful. The clinical symptoms and signs are decreased to absent cough reflex, audible gurgling sounds with respiration, changes on auscultation and percussion, and radiologic evidence of atelectasis (Table IV).

Once it becomes reasonably certain that a patient has an excessive accumulation of fluid in the tracheobronchial tree, what may be done to correct the situation? It is certain that in many patients, the fluid obstruction may be satisfactorily removed by means other than aspiration through a tracheotomy. Encouraging the patient to cough, elevation of the foot of the bed 15 degrees, constant or intermittent aspiration through

cable for reasons such as lack of skilled nursing attention, various muscle paralyses, and interference with patient rest, then tracheotomy should be performed without undue delay and should be, technically, an orderly elective procedure in this group of patients.

The advantages of tracheotomy are that (1) fluid aspirated or collected in the tracheobronchial tree may be readily and efficiently removed by aspiration through the tube; (2) the pharynx and its secretions are by-passed and thus eliminated as a cause of obstruction; (3) the upper respiratory areas of obstruction are removed; (4) the tube itself acts as a partial mechanical barrier to the aspiration of material from above its site; (5) less skilled nursing care is required, and (6) the improved airway allays apprehension.

Disadvantages of tracheotomy are: (1) an already ill patient is subjected to added strain resulting from the operative procedure; (2) the risk of complications such as wound infection, hemorrhage, pneumothorax, pneumomediastinum, tracheal stenosis; (3) obstruction to the flow of air offered mechanically by the tube; (4) respirator care, if one is being used or will be needed, is made more difficult (Table V).

The advantages and disadvantages of tracheotomy which are mentioned are presented in part in a brochure published by The National Foundation of Infantile Paralysis.<sup>10</sup>

# TRACHEOTOMY—FITZ-HUGH AND McLEAN

TABLE V. TRACHEOTOMY

<i>Advantages</i>	<i>Disadvantages</i>
1. Provides efficient route for the aspiration of obstructing secretions.	1. Subjects an ill patient to an operative procedure.
2. Allays apprehension	2. Risks of complications, e.g., infections, hemorrhage, tracheal stenosis, pneumothorax.
3. Pharynx and pharyngeal secretions by-passed and eliminated as a cause of obstruction.	3. Tube obstructs flow of air.
4. Eliminates areas of obstruction of upper air passages.	4. Respirator care more difficult.
5. The tube itself mechanically acts as a partial barrier to the aspiration of material from above.	
6. Less skilled attention necessary.	

TABLE VI. INDICATIONS FOR TRACHEOTOMY IN VARIOUS CATEGORIES

Series in Years	1930-1940 (10-year period)	1943-1953 (10-year period)	1954-1956 (2-year period)
No. Patients .....	102	150	110
Category 1			
Laryngeal Obstruction .....	65%	53%	29%
Category 2			
Tracheobronchial Obstruction .....	30%*	20%	54%
Category 3			
Prophylactic .....	(Approx.)	27%	16%
Category 4			
Laryngeal Spasm .....	0%	0%	1%

\*In the first series, the present classification was not utilized; however, the figures are essentially accurate.

It is our opinion that, when needed, the advantages of tracheotomy over the disadvantages are so great that one need give the latter little consideration. Complications and risks of tracheotomy even when performed by physicians with little surgical experience, are so rare and of so little consequence that they should be given small thought in making the decision to perform the procedure. Complications are greater, but still usually of little consequence, in the cases in which operation is performed for obstruction at the laryngeal level, some of these being disorderly emergency operations.

In our study of more than 300 tracheotomies performed under all types of conditions and upon all kinds of patients, we have found three examples in which a complication of the procedure *per se* could be considered contributory to the death of the patient. All were in the earlier group, there being none in the last 250 patients. Two were the result of secondary tracheal erosion and hemorrhage, due to an ill-fitting cannula; and the third, to a bilateral tension pneumothorax. These were in young children. Occasionally, a case of tracheal stenosis was seen resulting from high tracheotomy performed elsewhere as an emergency procedure in an infant. The stenoses were subsequently successfully treated. We have often seen slight wound infection, mediastinal emphysema,

and pneumothorax, none causing any real concern.

Tracheotomy in the second category has been employed in a large and variable number of illnesses. Our list includes poliomyelitis, cardiac arrest, brain tumors, amyotrophic lateral sclerosis, Gullian-Barre syndrome, meningitis, tetanus, uremia, pneumonia, neoplasms, cerebrovascular accidents, various types of trauma, to facilitate the administration of anesthesia, and others. Tracheotomy as an aid in the treatment of leprosy, eclampsia, and other conditions has been recorded in the literature.<sup>13</sup> We agree with Putney<sup>12</sup> that while the question of its necessity in such numerous and varied incidents may be open to more critical considerations, it has undoubtedly proved to be the difference between life and death in many cases.

The only contraindication to tracheotomy in the second category group, that has occurred to us, is in the case of pulmonary edema secondary to cardiac failure. Tracheotomy as a route for the successful removal of secretion may well be of no avail and, in fact, may be harmful. The proper treatment is the belief of the decompensation and pulmonary fluid by digitalization and other non-surgical means.

Some comment should be made in regard to the use of oxygen in the treatment of the group

of patients in which ventilation is inadequate for various reasons.<sup>2,8</sup> Administered oxygen which reaches the alveoli level will certainly aid in the relief of arterial hypoxia. The replacement of oxygen deficiency in the tissues will alleviate metabolic acidosis and strengthen the respiratory center. However, oxygen *per se* will do nothing to relieve carbon dioxide retention and respiratory acidosis, nor will it prevent pulmonary disease secondary to stasis and infection. The arterial blood can be well oxygenated despite severe hypoventilation if high concentrations of oxygen are inspired; however, carbon dioxide cannot be eliminated properly without an adequate volume of alveolar ventilation.

Table VI contains data in regard to the indications for tracheotomy in the various categories. From the figures in Table VI, one can observe a relative decrease in the number of tracheotomies for laryngeal obstruction—the category for which the procedure was originally devised many centuries ago—and an increase in the use of the procedure for other reasons. This has resulted from a better knowledge of the physiology of respiration and the methods of correcting diseased conditions responsible for any deviation from normal pulmonary ventilation.

The increase in the numbers in the second and third categories is due in part to the performance of more radical and extensive surgery about the head and neck in an effort to control carcinoma, and also to increased trauma sustained by the head, neck, and chest as the result of highway automobile accidents.

Another observation of interest to us was that in the 1940 series, it was necessary to examine records over a period of approximately ten years to obtain 102 cases of tracheotomy; in the 1953 series, also approximately ten years were necessary for the 150 cases; but in the 1956 series, a total of 110 patients had tracheotomies in a period of two years. It is true that in the last twenty-odd years there has been a gradual increase in the number of admissions to the University of Virginia Hospital, but not nearly enough to be a major influence in the statistics cited. It is obvious that many more tracheotomies have been performed in recent years upon essentially the same type and number of patients. Also, it should be mentioned that our poliomyelitis service has been a very small one, and this disease has been responsible for a very few tracheotomies in comparison

to the number in other institutions having large respiratory centers treating this disease.

The recent increase in the number of tracheotomies performed, particularly in our hospital, has raised the question in our minds (as, apparently, also in Putney's<sup>12</sup>) of its real necessity in such a numerous and varied list of patients. At the present time, the indications for tracheotomy for the individual patient are being scrutinized carefully and possibly will result in a decrease in the number of procedures. However, it must be kept in mind that the discomfort, complications from, and disadvantages of tracheotomy are so negligible that in case of doubt, the procedure should be favored.

Another matter of interest to us, and one on which we have no definite figures at the present, is the apparent lack of utilization of tracheotomy, except in the first category, in the smaller hospitals in our state which have less well-developed intern and resident staffs. Perhaps in the smaller community hospitals, encouragement in use of the procedure may result in the salvage of some lives.

### Summary

Observations are made in regard to the changes in the indications and increase in the incidence of tracheotomy. Emphasis is placed upon the value of tracheotomy as a route by which the lower tracheobronchial airway may be kept free of obstructing fluids in patients whose cough reflex is impaired for various reasons. The symptoms, signs, and deleterious effects of hypoxia and hypercapnia are stressed. Advantages, disadvantages, and the insignificance of complications of the procedure are briefly considered. Its employment may be abused, but when indicated, it may be a method of saving lives even in the nonemergency group of patients suffering with low grade, difficult-to-recognize, tracheobronchial obstruction, preventing satisfactory pulmonary ventilation.

### Bibliography

1. Bower, A. G., Bennet, V. R., Dillion, J. B., and Axelrod, B.: Investigation on care and treatment of poliomyelitis patients. *Ann. West. Med & Surg.*, 4:561-582 (Oct.) 1950.
2. Comroe, J. H., Jr., et al: *The Lung, Clinical Physiology and Pulmonary Function Tests*. Chicago: Year Book Publishers, 1955.
3. Cummings, G. D., Jr.: Tracheotomy in bulbar poliomyelitis. *Laryngoscope*, 61:668-686 (July) 1951.
4. Fitz-Hugh, G. S.: Tracheotomy: A study of 100 consecutive cases. *South. M. J.*, 34:1116-1121 (Nov.) 1941.

(Continued on Page 1443)

# Study Discloses Public and Doctor Opinion— MSMS House of Delegates Recommends Changes in Blue Shield

## ACTION—Part One

(See page 1406)

**T**he 1957 House of Delegates of the Michigan State Medical Society, meeting in Grand Rapids, September 23, 24, and in special session September 25, unanimously approved Reference Committee recommendations for sweeping changes in Michigan Medical Service (Blue Shield).

The House of Delegates Reference Committee on Medical Service and Prepayment Insurance, chaired by Max L. Lichter, M.D., gave long hours of consideration to reports of the Committee on Michigan Medical Service, George W. Slagle, M.D., chairman, the Committee to Study Comprehensive Prepaid Insurance Plans, C. I. Owen, M.D., chairman, and the Survey Committee, D. Bruce Wiley, M.D., chairman. The amended Slagle Report, as approved by the Delegates, is herein reported, as the culmination of the House action on this important question.

## SUPPORT—Part Two

(See pages 1408 and 1411-1436)

Pointing the way for Blue Shield changes were the results of the statewide Opinion Study of Prepaid Medical Care Coverage in Michigan, sponsored by the Michigan State Medical Society. The study was directed by the Delegates meeting in special session April 27 in Detroit.

Five months later, the four separate surveys of public and doctor opinion were presented to the House of Delegates in Grand Rapids by J. J. Lightbody, M.D., vice-speaker; George W. Slagle, M.D., president-elect, and Hugh W. Brenneman, survey director.

The study results commanded nationwide attention, and nearly 100 representatives of state medical societies, insurance companies and the press attended the Annual Session of the House of Delegates.

A copy of the 240-page study was distributed to delegates in Grand Rapids to aid them in their deliberations. In reproducing the study for this issue of *The Journal*, statistical tables have been omitted. A very limited number of copies of the full-published study report are available from the MSMS office,

## ACTION

### Report of the Reference Committee on the Report of the Survey Committee

The report of the Survey Committee was received by your Reference Committee. In considering this report the committee was aware of the great national interest evoked by the survey. Present were representatives from many state medical societies throughout the country, the insurance industry, associations concerned with health services, editors from state medical journals and national medical journals, and members of the press. In addition, numerous requests are being received from a variety of interested organizations.

The Committee was impressed with the extent of the study and the thoroughness with which it was conducted. The Committee strongly urges the utilization of the data of this admirable survey by all those concerned with the subject of prepaid medical care insurance.

Your reference committee highly commends the Survey Committee for an assignment well done. Particular commendation is due the survey director, Mr. Hugh W. Brenneman, our esteemed public relations counsel, for his unflagging zeal in organizing this monumental effort, his leadership which earned the untiring cooperation of his staff, and his meticulous attention to myriad of detail—and still completing the task on time.

The Committee wishes also to express its high-

est commendation to those who worked with Mr. Brenneman in this study:

To L. Fernald Foster, M.D., MSMS Secretary, and Mr. William J. Burns, MSMS Executive Director, who with Consultant Dr. J. Luck, Director of the Bureau of Business Research of Michigan State University and Richard B. Oudersluys, Director of the Market-Opinion Research Company, supported and wisely counseled.

To Warren F. Tryloff, Associate Director of the Study and Dick Philleo, Supervisor of Production, who at great personal sacrifice devoted their recognized talents unceasingly to the successful execution of the study.

To John B. Kantner of the Michigan Health Council who so ably wrote, and advised upon the preparation of the report, as well as the attendant publicity, in cooperation with Miss Kay Asby, a devoted and competent special survey assistant.

To Jack Pardee, Miss Jean MacDonald, Miss Vada Studt, Miss Helen Schulte and to the MSMS stenographic staff who sincerely contributed with their interest and time to the production of the materials upon which the survey depended.

And to Artist Dirk Gringhuis whose advice and assistance aided the publicity and was responsible for the fine appearance of the report.

### Report of the Reference Committee on the Report of the Committee on Michigan Medical Service

#### A. GENERAL CONSIDERATIONS

The Michigan State Medical Society has made an intensive study of the development and the operation of the many means currently employed both in Michigan and elsewhere to insure against, or to prepay, the cost of medical care. The conclusions resulting from that study are set forth below and are based upon the following fundamental considerations:

1. The people of Michigan are entitled to and should have health care which meets the highest standards attainable.

2. Means generally should be available in Michigan which will permit the financing of the costs of necessary medical services and supplies to the greatest extent possible and practicable through prepayment.

3. To whatever extent the cost of a particular medical service is not covered by prepayment, such uncovered amount shall be predictable, be known to the patient in advance, and be within his ability to budget out of income.

The foregoing can be accomplished only if those responsible for rendering the necessary medical services, namely the physicians of Michigan, assume the further responsibility of establishing within the profession a structure around which sound insurance or prepayment plans can be built and also a system by which the profession can assure itself, the prepayment-plan subscribers, and the underwriters that the structure is functioning in accordance with its commitments.

## B. COMMITMENTS BY THE MICHIGAN STATE MEDICAL SOCIETY

In light of the foregoing, the Michigan State Medical Society undertakes the following commitments.

1. Any contract offered by an insurance carrier or prepayment plan organization which embodies the principles set forth in Section C herein shall receive the endorsement of the Society, provided the carrier issuing this contract shall stipulate it will not offer any prepaid medical care contract which is preferential or discriminatory in its rating. This endorsement shall remain in effect as long as the carrier continues to make such contracts available and keeps the stipulation in effect.

2. It being the objective of the medical profession to make certain that voluntary health protection be available to all self-sustaining people at reasonable cost, the endorsement of the Michigan State Medical Society will be given only if rates charged by the insurance or prepayment carrier are fair and equitable and non-discriminatory.

3. The Society will use its best efforts to secure the participation of its members in all contracts endorsed by the Society.

4. A subscriber rendered care by a participating physician will receive "service benefits" as provided in his contract, the basis set forth in Section D, below.

5. The Council of the Michigan State Medical Society will appoint a Medical Care Insurance Committee having the following functions:

- (a) To examine all contracts submitted for endorsement. A report will be sent to The Council which will have the authority to issue a certificate of endorsement on behalf of the Society.
- (b) To cooperate with the Permanent Advisory Committee on Fees of the House of Delegates concerning the Relative Value Scale and applicable unit values.
- (c) To develop review procedures for any matters concerning the subscriber, the physician, the insurance carrier, and others.
- (d) To develop review committees in each of the Councilor Districts of the Society, nominated locally, which shall be appointed by The Council of the Michigan State Medical Society. These shall function under the direction of the Medical Care Insurance Committee, which will also serve as a unit to which appeal can be made from decisions of the review committee(s).
- (e) To make such interpretations of the language herein as may be required in connection with the endorsement of contracts.

6. Amendments to, or interpretations of, the principles set forth herein may be made by The Council of the Michigan State Medical Society

during the interim, between meetings of the House of Delegates of the Michigan State Medical Society.

7. The Michigan State Medical Society, sponsor of Michigan Medical Service, will urge Michigan Medical Service to make available, to any qualified group or individual, protection in accordance with the principles herein set forth, at fair and equitable rates, and pledges its support in such an endeavor.

## C. PRINCIPLES TO BE EMBODIED IN INSURANCE CONTRACTS

1. There must be complete freedom of choice of physician by the patient. Nothing in any contract will imply any restriction of this principle.

2. All benefits will be on a service basis consistent with the principles set forth in Section D, except when a subscriber voluntarily occupies a private room in a hospital.

3. The following services must be included in any basic program:

- (a) Surgical procedures wherever performed.
- (b) Medical services when the patient is confined to a hospital.
- (c) Consultation service in the hospital; surgical assistants where required.
- (d) Obstetrical services for the actual procedure in normal delivery, Cesarean section, or abortion and complications of pregnancy, but not to include routine prenatal and postnatal care. Optional supplemental insurance by the carrier to cover all obstetrical costs may be offered as provided in Item 4, immediately below.
- (e) Anesthesia by a physician, not an employee of a hospital.
- (f) Diagnostic laboratory procedures shall be provided in the out-patient department of a hospital, a private laboratory, in the physician's office (screening procedures are excluded).
- (g) Diagnostic and therapeutic radiologic procedures shall be provided in the hospital, the out-patient department, or in the physician's office.

4. At the option of the carrier, additional coverage may be provided for other medical services and supplies such as:

- (a) Home and office calls.
- (b) Benefits for prescriptions filled by a registered pharmacist.
- (c) The furnishing of prosthetic devices.
- (d) Physiotherapy in the out-patient department or the physician's office.
- (e) Other services which may be required in the treatment of the patient.

5. (a) For any necessary service other than in-hospital medical care, surgical care, obstetrical care and anesthesia, the subscriber shall have, at the time of utilization, a degree

## OPINION STUDY OF PREPAID MEDICAL CARE COVERAGE IN MICHIGAN

of financial participation in, and responsibility for, medical fees in addition to his premium. This shall be determined by the carrier but the responsibility of the patient shall be not less than 10 per cent or \$5.00, whichever is more, but not in excess of the scheduled fee allowance. In accordance with the terms of the contract, this amount shall become the obligation of the patient to the physician at the time of service and will be subtracted by the carrier from the payment for service it shall make to the physician. For any calendar year, however, patient participation shall not exceed the following:

Contract for which Eligible	Limit of Patient Participation Per Year
A	\$25
B	50
C	75

(b) While the provisions of (a) above are strongly urged by the Michigan State Medical Society, any carrier may have the option to waive the provision of (a) by a rider to provide for coverage without subscriber contribution.

6. There shall be three contracts to be known as Plans A, B, C. Each of these contracts shall apply to a specific income level and will provide service benefits. The income level shall be determined by a projection of the current rate of earnings of the basic wage-earner in the family and not by family income.

Where the basic income is not readily determined and established (such as self-employed, farmers, salesmen on commission) the Committee on Medical Care Insurance of the Michigan State Medical Society shall develop appropriate criteria for determining eligibility for service benefits.

- (a) Plan A will provide full service benefits for those subscribers whose basic income is less than \$2,500.
- (b) Plan B will provide full service benefits for those subscribers whose basic income is at least \$2,500 but less than \$5,000.
- (c) Plan C will provide full service benefits for those subscribers whose basic income is at least \$5,000 but less than \$7,500.

Those subscribers whose income is in excess of \$7,500 may purchase only Plan C. In this event, the total fee shall be the result of agreement between the patient and his physician. The plan

will pay the applicable "dollar allowance" to the physician.

7. The insurance carrier shall be responsible for classification of subscribers and appropriate designation of the plan in which they must be enrolled. Income designation shall reflect the subscriber's current rate of pay, projected on an annual basis. This designation shall be reviewed annually and changed as indicated by the review.

### D. BASIS OF SERVICE BENEFITS

1. The Michigan State Medical Society will develop a "relative Value Scale" which will assign to the individual surgical, obstetrical, and other medical services a value in units proportional to the relative value of that service. The Society will determine the applicable value of one unit for each class of benefit. By multiplying the number of units assigned to a procedure by the value of one unit, the "dollar allowance" for that procedure is obtained.

2. (a) The Michigan State Medical Society will establish unit values for medical, surgical and obstetrical procedures and anesthesia for each of the plans.

(b) For diagnostic laboratory procedures and for all radiologic procedures, the unit value will be the same for all plans.

(c) For any optional benefits offered by a carrier, the Society will establish appropriate unit values.

3. Until the Michigan State Medical Society establishes a Relative Value Scale, the scale developed by the California Medical Association shall be used.

4. No participating physician may charge more for a particular service rendered a subscriber than the "dollar allowance" payable for that service under the subscriber's contract. A subscriber covered by Plan C, whose income is designated as in excess of \$7,500, however, shall be responsible for any part of fees to which he agrees with his physician, in excess of the applicable "dollar allowance."

Respectfully submitted,  
Max L. Lichter, M.D., *Chairman*  
Laurence S. Fallis, M.D.  
H. C. Hill, M.D.  
R. L. Novy, M.D.  
D. G. Pike, M.D.  
Sydney Scher, M.D.  
W. F. Strong, M.D.

## SUPPORT

The Opinion Study of Prepaid Medical Care Coverage in Michigan was published and distributed to the Delegates in Grand Rapids. The 240-page volume contained detailed tables of statistics. In reprinting sections of the Study for JMSMS, only the statistical tables have been omitted.

# Official Report of the Opinion Study of Prepaid Medical Care Coverage in Michigan

MICHIGAN STATE MEDICAL SOCIETY  
606 Townsend Street, Lansing, Michigan

Sunday, September 22, 1957

Kenneth H. Johnson, M.D., Speaker  
House of Delegates  
Michigan State Medical Society

Dear Doctor Johnson:

On April 27, 1957, the House of Delegates instructed that the attitude of the public and its various components be obtained on the general subject of prepaid medical care and problems related thereto. The Council of the Michigan State Medical Society embarked on May 15 upon this assignment by initiating the "Opinion Study of Prepaid Medical Care Coverage in Michigan."

The responsibility for the conduct of this opinion study was vested in the Executive Committee of the Council, which became the Survey Committee.

The Study sought opinions and information regarding medical care coverage from four sources: (1) The consumers of medical service—a selected sample of the public queried through personal interview; (2) a broader selected public reached by the mailed questionnaire; (3) the doctors of medicine as the purveyors of medical care; and (4) available research material on the overall question.

By action of The Council this day, September 22, 1957, the report of the Michigan State Medical Society Opinion Study of Prepaid Medical Care Coverage in Michigan was approved in its entirety and is submitted to you with the intent and hope that the information will be of value in consideration, by the MSMS House of Delegates, of the weighty problems that face our Society's policy-making body. We have confidence in your wisdom and judgment.

Respectfully submitted,  
D. Bruce Wiley, M.D.  
*Chairman of The Council*

# Contents

## Official Report of the Opinion Study of Prepaid Medical Care Coverage in Michigan

Letter from Chairman of The Council.....	1409
Introduction to Study.....	1412
Methodology .....	1413
Conclusions .....	1414

### Highlights

Public opinion survey of prepaid coverage and related costs.....	1417
The doctor opinion survey on prepaid medical care plans .....	1419

### Summary

Summary of opinion survey of prepaid medical care coverage and related costs .....	1423
Summary of survey of consumer opinion on medical care protection.....	1428
Summary of survey of doctor opinion on prepaid medical care plans.....	1430
Summary of survey of related studies on prepayment of medical costs.....	1435

# Acknowledgments

## AN OPINION STUDY OF PREPAID MEDICAL CARE COVERAGE IN MICHIGAN

### MICHIGAN STATE MEDICAL SOCIETY

Sponsor

### MICHIGAN HEALTH COUNCIL

Co-Sponsor

### *Survey of Consumer Opinion on Medical Care Protection*

#### OFFICERS OF MSMS

*President*.....Arch Walls, M.D.  
*President-Elect*.....George W. Slagle, M.D.  
*Secretary*.....L. Fernald Foster, M.D.  
*Treasurer*.....W. A. Hyland, M.D.  
*Speaker*.....Kenneth H. Johnson, M.D.  
*Vice Speaker*.....J. J. Lightbody, M.D.  
*Editor*.....Wilfrid Haughey, M.D.  
  
*Executive Director  
and Administrator*.....William J. Burns, LL.B.

\* \* \*

*President, Michigan Health  
Council* .....J. K. Altland, M.D.

#### SURVEY COMMITTEE

D. Bruce Wiley, M.D., Utica, *Chairman*  
W. B. Harm, M.D., Detroit, *Vice Chairman*  
L. Fernald Foster, M.D., Detroit  
Wm. J. Burns, LL.B., Lansing  
W. A. Hyland, M.D., Grand Rapids  
K. H. Johnson, M.D., Lansing  
W. M. LeFevre, M.D., Muskegon  
J. J. Lightbody, M.D., Detroit  
B. B. Saltonstall, M.D., Charlevoix  
Ralph W. Shook, M.D., Kalamazoo  
G. W. Slagle, M.D., Battle Creek  
Arch Walls, M.D., Detroit

#### STAFF

*Director of Study*  
Hugh W. Brennenman, Lansing  
  
*Associate Director of Study*  
Warren F. Tryloff, Lansing  
  
*Consultants*  
David J. Luck, Ph.D., Lansing  
Richard B. Oudersluys, Detroit  
Lester P. Dodd, Detroit

NOVEMBER, 1957

#### SUPERVISION

*Editorial*  
John B. Kantner, Lansing  
  
*Production*  
Dick Philleo, Lansing  
  
*Publicity*  
Kay Asby, Lansing  
  
*Graphic Arts*  
W. L. Veenendaal, M.S., Michigan  
State University, East Lansing

#### DEVELOPMENT

Jean MacDonald  
Jack Pardee  
Helen Schulte  
Vada Studt and five MSMS Stenographers

#### SERVICING AGENCIES

Market-Opinion Research Company, Detroit—Richard B. Oudersluys, *Managing Director*, Service Bureau Corporation  
Division of International Business Machines Corporation  
Beurmann-Marshall Service Corporation, Lansing.  
Lansing Secretarial Service Center, Lansing—Mrs. W. A. Pomeroy

\* \* \*

It is difficult to acknowledge formally all of those who contributed to this study. But to the many persons, in addition to those above, who helped by giving their time, advice and encouragement, we express our grateful appreciation. Special thanks are expressed to the *Detroit Sunday Times* and *Lansing State Journal* newspapers for the sincere interest in this study and their help in getting reader participation in the survey by printing it in full, so it could be filled out and returned for tabulation.

The Market Opinion Research Company of Detroit accepted and carried out the responsibility for conducting the Opinion Survey of Prepaid Medical Care Coverage and Related Costs.

## Introduction to Study

Prosperity was general in the year 1957. People were working and making money and jobs were plentiful. Yet, because of inflation, people were sometimes hard put to make ends meet.

Although the costs of all products and services were increasing, one of the most galling bills to pay was the doctor's bill.

While, realistically, people accepted the fact that their doctor was a highly trained, skilled scientist, they did not fully appreciate the rapid advances in his science. Many scientific changes, such as the administration of anesthesia, for example, offered greater protection to the patient, but, sadly enough, they cost him more money when he went to a hospital for an operation. The new drugs lessened the patient's stay in bed and got him back to work sooner, but it was more painful to pay for the prescription.

There were other changes taking place, too—socio-economic changes in which people in 1957 sought and expected greater security in the financial returns from their jobs. Fringe benefits became the accepted and demanded right of the individual.

So they came to expect it.

But nothing is free. The economic facts of life still continued to operate. Costs continued to rise, and the medical insurance plan which fitted the financial structure of the forties was an economic lag in the fifties. The doctors realized it and began to make a careful appraisal of these plans to see where changes could be made.

It was about that time that the labor unions saw an opportunity for a new approach in fertile fringe benefit territory. Whenever they demanded higher wages, the higher wages merely increased the cost of the products and added to the spiralling inflationary process. That left the worker with little net gain in the value of his take-home pay. So labor turned its attention to the sociological programs in which health insurance plans were one of the most important to union members. Labor talked of increases in benefits which would lead to full medical coverage in such programs as the Blue Shield plan operated by the doctors of medicine, and they threatened to start their own medical plan if the doctors did not accede.

It was in this climate of social and economic change that the Michigan State Medical Society's Opinion Study of Prepaid Medical Care Coverage in Michigan was born.

Changes had to be made in medical care plans and surgical insurance protection. Since the medical profession and the public are partners in these plans, it was felt that both should have an opportunity to express their views about what

medical-surgical services should be offered.

The Michigan State Medical Society House of Delegates met in Special Session in Detroit on April 27, 1957 to consider the necessity of changes in the Blue Shield Plan. After careful deliberations, they passed the following motion:

That to complement better the work of present committees, the Michigan State Medical Society Council or its Executive Committee be instructed to immediately conduct a survey to determine the attitude of the consumer public generally regarding services which should be offered, as well as the economic potential to pay for such services, and that it utilize any survey material and information already available together with such other facts as can be secured to effect that end, this survey information to be made available to this House of Delegates at the September, 1957, meeting through the Annual Report of the Council of the Michigan State Medical Society.

In other words, members of the House of Delegates authorized a Study which would find out four things—

1. What medical services do people want covered by medical prepayment plans, and what do they feel is the order of priority for these services?

2. How much will people be willing to budget for these services, and which of the services are they most willing to pay for?

3. What do doctors want from any prepaid medical or health insurance plan?

4. What data is available from other surveys conducted throughout the United States recently on the same questions?

The project was given the title, "An Opinion Study of Prepaid Medical Care Coverage in Michigan." The Survey Committee of the Michigan State Medical Society accepted responsibility for the Study. Members of the Committee were actually members of the Executive Committee of the Council of MSMS. The Michigan Health Council, a non-profit educational organization, cooperated with the Michigan State Medical Society in conducting a portion of the total Study.

The entire study was unique in many ways. For one thing, it was operated on a fast-moving time schedule. Usually a comprehensive study of this nature would take several years to complete. From the decision to report of the results, this one was finished in only five months. The speed was an essential part of the study's accuracy.

The study was unusual in another way, in that an extensive publicity campaign was carried out all the time the project was in the works, including radio, television, and press coverage. As a rule, there is little publicity on a survey until the results are announced. In this case, however, much attention was given the Study so that there would be a maximum return of the questionnaires.

Many hours of work have gone into the preparation of this comprehensive report. The members of the Michigan State Medical Society undertook this project as a public service to the people of Michigan and the nation. It is hoped that the vital information contained in the pages that follow will be of use to insurance companies, health

insurance advisory groups, other state medical societies and Blue Shield plans.

The people have spoken. Inevitably their thoughts and opinions will have a significant effect on the course and direction of future medical insurance programs.

## Methodology

The Opinion Study on Prepaid Medical Care Coverage in Michigan consisted of four separate but integrated surveys—

- Opinion Survey on Prepaid Medical Care Coverage and Related Cost
- The Survey of Consumer Opinion on Medical Care Protection
- The Survey of Doctor Opinion on Prepaid Medical Care Plans
- The Survey of Related Studies on Prepayment of Medical Costs.

Information from the first three surveys listed above was recorded on IBM cards and tabulated by the Service Bureau Corporation on IBM machines.

### OPINION SURVEY ON PREPAID MEDICAL CARE COVERAGE AND RELATED COST

The Medical Care Coverage and Related Cost Survey consisted of 1,000 personal interviews conducted by the Market-Opinion Research Company of Detroit. Forty per cent of the sample was selected from eighty-five census tracts in Wayne County. The balance of the sample was taken from twelve out-state counties—Allegan, Berrien, Calhoun, Chippewa, Grand Traverse, Ingham, Kalamazoo, Kent, Lenawee, Saginaw, St. Clair, and Oakland.

This is how the census tract selection was made for the interviews. Census tracts are numbered. The first tract was selected at random, then every sixth tract was chosen as an interview location. A block was chosen at random in each tract and four interviews were conducted per block. In larger census tracts, two blocks were chosen. A total of 100 blocks were used in the Survey.

When no census tract was available for the sample selection, the "quota control method" was used. In this method, the interviewers have quotas of respondents which represent population characteristics such as rural, urban, occupational, age and racial classifications. Quotas are in proportion to the population and number of population characteristics in each county.

### SURVEY OF CONSUMER OPINION ON MEDICAL CARE PROTECTION

The Survey of Consumer Opinion on Medical Care Protection was a mail survey conducted by the Michigan Health Council. The names of persons to receive the questionnaires were selected from the 1957 Michigan automobile registrations. This is a more recent and complete listing than that provided by the 1950 U. S. Census Bureau. In addition, approximately 80 per cent of the names on the list are men. Since this survey was directed toward men who actually purchase about 80 per cent of the medical insurance contracts through their places of employment, the proportion of men on the automotive listing made it an ideal source of names.

Questionnaires were allotted each county according to its percentage of population to the entire state as indicated in U. S. Census figures. Lansing, with its diversified representation of income, occupation, and age groups was designated as the test city. Returns from Lansing compared favorably with early returns from throughout the state.

To give the survey the widest distribution possible, questionnaires were published in full by the *Detroit Times* and the *Lansing State Journal*. A total of 308 persons responded.

In a special effort to get the questionnaire directly into the hands of people who work in Michigan industries, municipal governments, merchandising and sales organizations or trade associations, personal letters were written to employers, with a copy of the questionnaire enclosed. The employers were asked to spread the word in their publications and request additional copies of the questionnaire for wide distribution among their workers. Approximately 12,800 were sent in answer to requests and 859 or 6.7 per cent were returned.

The Michigan Health Council mailed 40,162 questionnaires and 39,380 were delivered. The return was 4,702 or 11.9 per cent.

The Michigan State Medical Society mailed 6,340 questionnaires to its members, and 6,328 were delivered. The return was 1,878 or 29.7 per cent. The Michigan Health Council also mailed 10,000 to the Lansing area with a delivery of 9,461. The return was 1,066 or 11.3 per cent.

Total returns on the Survey of Consumer Opinion on Medical Care Protection, including request and newspaper distribution, amounted to 8,813.

The 1,878 questionnaires returned by the medical profession were not tabulated with those returned by the general public because answers from this special occupational group would bias the survey. However, these questionnaires will be tabulated and used in subsequent studies. Thus, by subtracting the 1,878 responses from the total returns, the adjusted total returns would be 6,934.

#### SURVEY OF DOCTOR OPINION ON PREPAID MEDICAL CARE PLANS

The Survey of Doctor Opinion on Prepaid Medical Care Plans was a mail questionnaire sent to Michigan State Medical Society members along with the Survey of Consumer Opinion on Medical Care Protection. The number sent was 6,340 and 6,328 were delivered. The return was 2,435 or 38.5 per cent.

The total number of returns for all three surveys was 12,248. The mailings and personal interviews took place in July, 1957. The cut-off date for returns on all public-opinion questionnaires was July 31. The cut-off date for returns on the Doctor Opinion questionnaire was August 17.

Recording and tabulation began with the return of the first questionnaire. The "write-in" answers were coded so that these answers could be incorporated with the other pre-coded answers on the balance of the questionnaire. These, in turn, were punched, tabulated, and sorted by the Service Bureau Corporation, a subsidiary of the International Business Machine Corporation. IBM heavy production equipment was used in handling the millions of factors involved.

#### SURVEY OF RELATED STUDIES ON PROTECTION AGAINST MEDICAL SERVICE NEEDS

The Survey of Related Studies on Protection Against Medical Service Needs was developed by reviewing and compiling twelve surveys made in other parts of the United States on the same basic question. These were the only surveys previously made.

The six surveys selected for report include—

- *Summary of Survey of Physician's Attitudes Toward Voluntary Health Insurance*, American Medical Association, Council on Medical Service, January, 1954
- *Attitudes Toward Health Insurance*, Social Research, Inc., 1956
- *Reactions of People in Two Harbors to Different Plans of Paying for Medical Care*, Department of Rural Sociology, University of Minnesota, 1956
- *Report of Committee to Study Comprehensive Prepaid Insurance Plans*, Michigan State Medical Society, 1957
- *Family Medical Costs and Voluntary Health Insurance: A Nationwide Survey*, Health Information Foundation, 1956
- *Voluntary Health Insurance in Two Cities*, A survey of Subscriber Households, Health Information Foundation, 1957
- *Charts and Graphs: A Supplement to Voluntary Prepayment Medical Benefit Plans*, Council on Medical Service, American Medical Association, 1957.

## Conclusions

#### THE OPINION STUDY OF PREPAID MEDICAL CARE COVERAGE IN MICHIGAN AS REPORTED IN THIS DOCUMENT IS A VALID ONE

It has been checked against statistical facts available from other recognized sources and found to be within the tolerances of accuracy.

The separate surveys of the study, although accomplished independently and using different samples, agree in every basic category of study. Even in details where minor differences are noted, the trends and their implications are alike.

The desires of the sponsors of this survey, as reviewed elsewhere in this report, have to a major degree been met. The sponsors at no time expressed a desire for anything except the most unbiased information. In every instance where bias might have been possible, extra precaution was taken to avoid it insofar as it is humanly possible

under the accepted standards of survey procedures.

The timetable of the survey was unusually rapid. This increased the expense, at the same time improving the accuracy and eliminating possibility of an organized campaign by any person or group to bias the answers received.

The public took a great interest in the survey, as is evidenced by the unusually high ratio of return of mailed questionnaires. The interviewers received an unexpectedly sincere welcome from those interviewed and were given thoughtful replies. Interest in the survey reflects interest in the question. Cooperation of the public was also reflected by the generous help and attention given the survey by the various media of communication. Few previous surveys on any subject have received comparable publicity prior to the release of their findings.

## CONCLUSIONS

The present value of this study is that it supplies a true reflection of the desires and attitudes of both the surveyors and consumers of medical care in Michigan which cannot be fairly questioned or distorted and upon which decisions affecting the lives of millions of persons can be reliably based.

The attitudes delineated herein may change, but this survey will continue to have value in the future as a bench mark. For, as of this date, the people have spoken and their voice is accurately reported. Literally millions of facts are available from such an extensive survey as this.

The Survey Committee does not pretend to be omnipotent in foreseeing that answers to all questions asked by any person, which can be obtained from the statistics, are herein reported. However, the conclusions and highlights arrived at are, in the opinion of the Committee, the answers to the major questions posed by the sponsors of the survey.

Among the voluntary, non-profit, health insurance\* plans on a national basis, the most widely accepted plan is the combination service-cash indemnity. Blue Shield in Michigan falls in that category. There is not known to be any great difference between the types of commercial insurance policies sold in Michigan and those generally sold throughout the country. In this state, there is but one Blue Shield plan administered by a single corporation—Michigan Medical Service.

This corporation is guided in its policy by the recognized policy-making body of the medical profession in this state. There are no Blue Shield plans offered in Michigan other than that by Michigan Medical Service. This contrasts with many other states which have one or more Blue Shield plans, with one or more corporations administering them.

Blue Shield in Michigan has a larger percentage of the total population of the state enrolled than does any other plan in any other state. A total percentage representing eight out of ten persons in Michigan (81 per cent) are covered by some form of health insurance. The responsibility and influence of Michigan Medical Service in the health insurance field in Michigan cannot be gainsayed when the fact is faced that six out of ten persons covered by health insurance (64.6 per cent) are protected by Blue Shield.

It is further significant that today, in contrast to yesteryear and in fantastic contrast to the situation in 1940, this state has reached a point of semi-saturation in the health insurance field. This has caused major competition for business between insuring agencies to be directed toward persons already insured, or becoming newly eligible. The remaining number of uninsured are, in their aggregate, relatively poor prospects.

Although often confused in terminology with

\*The words "health insurance" or "insurance" used throughout these conclusions means some type of prepaid medical and/or surgical coverage.

the term Blue Cross, the existence of the Blue Shield plan is widely known and the terms Blue Cross or Blue Shield are rapidly becoming in the public mind generic,—meaning a non-profit voluntary health insurance plan. Those persons not covered by Blue Shield remain unprotected in the main, according to their replies, because they "can't afford it." No attempt was made to go behind this answer.

Coverage exists in all counties of the State with concentration paralleling density of population.

Blue Shield is popular in Michigan. Eighty-one per cent of the people who have it, like it. This is a higher percentage of favorable reaction than is held by the insured of any other company in which they are insured. A greater percentage of people have a favorable attitude toward Blue Shield than toward any other insurance plan offering medical-surgical coverage, and that percentage is a sizable majority of the total population of the state. Of interest is the fact that, on the whole, members of unions have a slightly more favorable opinion of Blue Shield than does the general populace, and an even greater percentage of favorable attitude when compared with non-members of unions. People in the most densely populated area of the state (Wayne County) expressed an unfavorable opinion more often than did the residents of other areas of the State. High rates was the reason most often given for an unfavorable attitude, when such was expressed. People like it, but some people don't like to pay for it.

The doctors like Blue Shield too, even though they feel that its service can and should be improved. They are more skeptical of the favorable attitude held by the people than the facts warrant.

The doctors have thousands of ideas for improving their corporation's service. They are not hesitant about expressing these ideas to their society or their corporation and seem perfectly willing to be identified with the thought they express, be it critical or complimentary. The doctors are not adverse in their attitude, generally, toward health insurance being sold by insurance companies. In fact, many, although a small minority of the total number, believe that the medical profession should "get out of the health insurance business altogether." They don't like plans which propose closed panel service at all.

The doctors' chief gripe at Blue Shield is "inequities" in the schedule of payments they receive for services. They say the fee schedule hasn't kept pace with the changing science of medicine, nor the rising cost of living. They think most of the people who have an unfavorable attitude toward Blue Shield have it because they don't understand what benefits they are entitled to and have an exaggerated concept of the amount of money they pay for protection. This judgment of the people's lack of knowledge and understanding is born out by the facts.

There is evidence of sufficient dissatisfactions

with various and sundry aspects of Blue Shield to warrant investigation of changes which might improve it, both from the standpoint of rates and benefits as well as from payments to doctors. This is not to say that, on the evidence, such a change should be drastic. The changes most often requested by respectable numbers of returns from doctors point to inequities which, although they may have existed before Blue Shield, are nonetheless accentuated, in the minds of the doctors, by Blue Shield. Specialties, hardly in existence when Blue Shield was born, now have standards and skills demanding consideration of increased payments on the basis of every criterion save tradition.

The public seems to understand and recognize the value of the more widely publicized medical-surgical procedures such as surgery and x-ray and want to be protected against their cost so they can have these services wherever and whenever needed. Illustration of this fact is the almost unanimous demand (96 per cent) for protection against surgical expense. Of the services not presently covered by Blue Shield, the highest number of people wanted x-ray in the doctor's office or the hospital out-patient department.

Great numbers of people are almost shockingly unfamiliar with the provisions of their Blue Shield contract or their insurance policy. Insofar as rates are concerned they almost always think they are paying more than they are. They think they are paying an average of 100 per cent more than they actually do! Reasons advanced for this common misconception is that the Blue Cross (Hospital) premium is often confused with the Blue Shield (Medical) premium since they are sold in the same package and only one total payment per month is made. Nonetheless, the wide divergence from reality of the cost or rates of Blue Shield is a fact and (see above) a major cause for unfavorable opinion. Since the overwhelming proportion of Blue Shield protection is purchased through the place of employment, it is quite possible that the subscriber merely accepts what is offered and doesn't find out what's in the policy. This may account for misconceptions about coverage which plague the doctors and makes them believe that the subscriber does not understand his contract. Almost 50 per cent of the doctors think that doctors, generally, don't understand the coverage offered, either.

Broadly speaking, the people want most of the benefits which they now have in the Blue Shield contract, but think they have more benefits in their contracts than are actually there. They want benefits they don't now have in about the same proportion and preferential sequence as the ones they mistakenly thought they had.

Most of the doctors believe that some benefits not presently included in the Blue Shield contract should be. Certain generalists and internists are in accord that some benefits which they would service should be included. Comparing the pay-

ments for their services now included in the contracts with those received by the surgeon and certain other specialties, they feel they are underpaid.

Most doctors agreed that if outpatient diagnostic benefits were to be added to the Blue Shield contract, such benefits should not be limited only to treatment in a hospital outpatient department, but should be qualified if the treatment were in the doctor's office or certified laboratories as well.

While doctors were almost equally divided on the question of what benefits should be added, they were in agreement that the medical service principle should not be limited to low-income groups. They also agreed that the service principle should apply to those subscribers in the \$7,500-and-below income bracket, providing the payment to doctors for services rendered to this group were increased.

The people are willing to pay more than they are now paying for prepaid medical care coverage. That statement is generally true but it is qualified with two provisions. The first qualification is that they will pay more than they are now paying if they get *all* the benefits they ask for, and it is quite obvious that they are willing to pay more than these services now would cost (at the prevailing \$5,000-income limit fee schedule). The other provision is that the income limit be raised to include a far larger majority of the people than is included under the \$5,000-income limit.

The evidence is that the people are willing to pay much more than they are now paying for the addition of relatively few and not too costly additional services. This may be an index of prosperity or it may be conditioned by the fact that they now think they are paying more than they actually are.

A deductible feature is popular with a large number of people—almost a majority when it is predicated upon a lowering of monthly premium costs. The survey also showed that twice as many people wanted major and minor costs covered as wanted major costs only. The value of this latter conclusion (taken from the Consumer Opinion Survey) in determining public opinion is dimmed by the demonstrated lack of unanimity on the meaning of the terms, as well as a lack of knowledge of the various benefits.

Findings of the Doctor Opinion Survey definitely give the conclusion that by far the majority of doctors in private practice want and need Blue Shield, believe in its policies, abide by its principles, and are satisfied with its administration. They would like to see as much of the control vested on the local level as can reasonably be done without sacrificing the present generally satisfactory performance of the corporation. Should additional control be placed on the local level, the doctors want the guiding hand to be the county medical society in every instance.

Widely agreed upon was the necessity of some supervision, more than is presently arranged, of the

## HIGHLIGHTS

utilization of Blue Shield. Even more definite was the opinion that greater supervision must be accorded utilization of Blue Cross. This necessity was sensed from the Consumer Opinion Survey, even though no question regarding utilization was asked (as it was not germane to the two basic aims of that survey). It seems fairly apparent that with the obvious advantages of a plan which has a service feature goes the responsibility of providing a maximum efficiency and a minimum of needless waste.

Throughout the Doctor Opinion Survey, the results showed the doctors generally agreed on basic principles and basic philosophies and supported present policies, no matter when and with which questions they were tested. Areas of lack of agreement were recognizable only on questions when matters of methods or fees were at stake.

And in instances which involved the need for knowledge of the more difficult and unfamiliar aspects of insurance or business practice marked agreement was usually not apparent. It was noted

that upon questions which involved intimate relationships with agencies, the doctors uniformly tended to prefer to "stay away" from contact with these agencies as a means of avoiding difficulty or external controls, which they obviously abhor. However, the doctors are willing to subject themselves to disciplining from their own profession as a practical necessity, even though it means some loss of independence in their practice. These findings are consistent with the profession's opinion that policy matters in respect to administration of Blue Shield should remain, in general, the prerogative of the doctor but that lay experts were needed to solve administrative problems with the help of advisors from the profession.

These are a few of our conclusions. You are welcome to draw additional conclusions from the tables published in this study.

\* \* \*

The preceding Conclusion Section was prepared especially for the September 23-24, 1957, meeting of the Michigan State Medical Society House of Delegates. In subsequent publications of this study, this section may be augmented.

## Highlights

### PUBLIC OPINION SURVEY OF PREPAID COVERAGE AND RELATED COSTS

1. An overwhelming majority (81 per cent) of people in Michigan have some type of health insurance to protect themselves against unpredictable medical expenses.

2. Just over a third of the relatively small number of those who did not have health insurance claimed they hadn't bought it because it was too expensive for them. The rest gave varying reasons and included the persons who said they never got around to taking out a policy, as well as the rugged individuals who didn't feel they needed insurance because they could take care of themselves.

3. More than twice as many insured\* people (64.6 per cent) are covered by Blue Shield in Michigan than by all other health insurance plans and policies combined.

4. All or part of medical insurance premiums are paid by employers for half of the Michigan policy-holders, and employers pay the entire premium for about one-third of this group. Two-thirds of these people said they would be willing to pay an additional premium themselves to get any add-

ed benefits they would like in their group contract. One-third were not willing to pay an added premium to get added benefits over and above that paid by their employer.

5. The ratio of the insured in the surveys generally agreed with the number of family groups, homes with only a husband and wife, and single people in the state. The ratio is approximately 5-3-2—five for family, three for husband and wife, and two for single.

6. Nearly three out of four people have called upon their insurance company for policy benefits.

7. Of those using their insurance, 61 per cent had to pay an additional amount over and above that paid for them by the insurance company. Slightly more than half of the extra charges were from doctors' fees, and less than half were for services not covered in their policy.

8. X-ray was the major service, other than doctor fees, causing the extra charge 17-19 per cent of the time.

9. Twenty-two per cent of the people said they paid less than \$50 for medical expense over and above that amount paid by the insurance company the last time they used their policy.

10. People want x-ray services, either in the doctors' offices or out-patient departments of hospitals, covered in their policies. Farm, labor, and business and professional groups had four benefits they were most interested in—emergency house calls, diagnostic services in doctors' offices, x-ray in hospital out-patient department, and diagnostic x-ray in doctors' offices. Farmers were least inter-

\*The word "insured" used throughout these Highlights means a person who is protected by some type of prepaid medical and/or surgical coverage.

NOTE: People who were interviewed were allowed to make up a hypothetical policy for themselves by selecting benefits from a complete list of possible services in hospitals, doctors' offices and the patient's home. The list included everything that people might possibly want in a policy. Numbers 11 to 18 tell what they wanted in medical insurance protection, according to the three types of plans offered—family plan, self and spouse or single persons.)

ested in the adding of any of those benefits.

11. Everybody in all three plans wanted three in-hospital benefits in particular. Surgical led the list, diagnostic x-rays were second, and medical in-hospital visits were third.

12. When they were asked to choose what services members of all three plans wanted in a doctor's office, again they were unanimous in the leading choice—each desired emergency first aid. The second selection was minor surgical treatment.

13. Relatively fewer people were interested in having medical services in their homes. Less than half of them wanted home calls covered. About the same number wanted ambulance service, too.

14. The benefits selected by those interested in a hypothetical "family" plan would cost \$11.24 a month. The price for the "self and spouse" plan after selections were made was \$8.75, and the cost of the "single" plan was \$3.26. Remember, these price tags on each plan differ because, naturally, they vary in proportion to the number of people covered in each of their respective and individual contracts.

15. Union members developed hypothetical policies which cost slightly more than nonunion members. Union members in the "family" plan chose one which would cost 62 cents more. Those on the "self and spouse" plan selected one costing 75 cents more. However, union members in the "single" plan, chose a policy costing exactly the same as nonunion members. So the maximum variation in the price of a policy selected by union and non-union members was only 75 cents.

16. In a comparison between income groups, those making over \$5,000 a year wanted a "family" policy that cost only 60 cents more than the one selected by the people making less than \$5,000 a year. Those in the "self and spouse" plan making more than \$5,000 a year picked a plan that costs 23 cents more than the people who were earning less than \$5,000 a year. And those in the "single" plan making over \$5,000 a year chose a policy that costs 3 cents less than the one desired by the people who earned less than \$5,000 annually, so the greatest spread in this case was only 60 cents.

17. Rather than eliminate services in the policy they had selected to reduce the monthly premium, three-fourths of the people preferred to pay for the benefits in their original selection, rather than eliminating any item of service. The percentage of the vote on the items they would eliminate was very small. In fact, the highest percentage was only 11 per cent, and this was voted by those in the "self and spouse" plan who chose diagnostic x-rays in the out-patient departments of hospitals as the thing they would eliminate. Those in the "family" plan also chose this service, but only 9 per cent were in favor of eliminating it.

18. After eliminating certain coverages to bring the costs down, the prices of the three hypothetical plans stacked up like this. The "family" plan

was reduced from \$11.24 to \$10.09, or a reduction of 95 cents. The "self and spouse" plan originally selected would cost \$8.75 a month. This was reduced by \$1.10 to \$7.65 a month. The final price desired in the "single" plan was only 14 cents cheaper. Originally the "single" plan people had selected a policy worth \$3.26 a month, and in their final selection it was \$3.12 a month. In every case, union members were willing to pay an average of 33 cents more than nonunion members for the services they wanted.

19. Forty-seven per cent of the people were in favor of the idea of a deductible type of medical-surgical insurance plan; 53 per cent were not in favor of it.

20. A little less than half of the people who favored a deductible plan were willing to pay the first \$25 of medical expense. About a third of those who favored it, were willing to pay up to \$50, and slightly more than 10 per cent were willing to pay the first \$100 of medical expense.

21. A two-thirds majority of both farm and labor organization members wanted a \$25 plan. The same percentage of people making less than \$5,000 a year wanted the \$25 deductible.

22. Two-thirds of the people wanted their prepaid medical plan to cover both major and minor items of expense.

23. A majority of the people (78 per cent) would rather have the insurance company pay the doctor directly.

24. When people were asked what they thought their insurance contracts covered, 95.8 per cent knew they had surgical benefits, 93.9 per cent knew they were covered for obstetrics, 83.6 per cent correctly figured they had diagnostic X-ray, 65 per cent thought medical visits in the hospital were included, but only 44.4 per cent—less than half—knew for sure that they had the benefit of emergency first aid in the doctor's office. And more seriously, only 27.8 per cent knew that nineteen surgical procedures, which could be done in the doctor's office, were covered. Yet the maximum contract covered all these things.

25. Then they were asked what they thought they had, and here's how they answered. Nearly half—45 per cent—assumed they had diagnostic benefits other than x-ray, 42 per cent assumed the surgical assistant was paid by the insurance company, 36 per cent figured they were covered when their doctor had a medical consultation with another doctor about their case, 34 per cent banked on the insurance to cover pre- and post-natal care in the doctor's office, and finally, 32 per cent figured that out-patient diagnostic x-rays were covered. But none of these benefits are covered by existing Blue Shield contracts.

26. A majority of the public (64 per cent) has a favorable opinion of Blue Shield. Only 10 per cent of the people felt unfavorable toward the plan, while one-fourth of the people interviewed had no opinion, one way or the other. The ma-

majority of union members felt favorably towards Blue Shield. In fact, union members felt more favorably toward Blue Shield than the general public, by 2 per cent.

27. Of the small percentage of people who felt unfavorably toward Blue Shield, two-thirds felt the rates were too high, and only one-third complained about the coverage.

28. The policy holders of Company A were asked to express the opinion they had about their company. More than three-fourths of them looked upon the company favorably. When policy holders in Company A and nonpolicy holders in Company A were asked what they thought of the firm, one-fourth of all the people interviewed had a favorable opinion of the company, but two-thirds expressed no opinion. Of the 12 per cent who had an unfavorable attitude toward Company A, half

of them felt the company misrepresented the policy and had a poor claim-paying record. Less than 10 per cent complained about poor coverage and high rates.

29. One-half of the policy holders in Company B had a favorable opinion of the organization, but slightly more than 40 per cent had no opinion about the company. All of the persons interviewed, whether they were policy holders or not in Company B, were asked how they felt about the company. Three-fourths of the people had no opinion, 14 per cent had a favorable opinion, and 10 per cent had an unfavorable opinion. Half of the people who had an unfavorable attitude toward the company thought they had a poor claim-paying record, about one-third felt the policy was misrepresented and gave poor coverage; while 14 per cent complained about the rates.

### THE DOCTOR OPINION SURVEY ON PREPAID MEDICAL CARE PLANS

1. Of Michigan's M.D.s, 28 per cent believe that administration of the major medical and surgical prepayment plans in Michigan should remain in the hands of the medical profession and the commercial insurance companies on a competitive basis, as it exists today. One-third felt that the plan should be administered by qualified laymen retained by the medical profession. Another third felt that the medical profession itself should administer the programs.

2. Nearly two-thirds of the doctors believe that their profession is not given sufficient voice at the local level in determining Blue Shield policies. Half of them don't think they have enough to say about Blue Shield policies on the state level. They feel that county medical societies and specialty groups should have more to say about policy matters.

3. Almost three-quarters of the doctors agreed that the House of Delegates should elect the Blue Shield Board of Directors.

4. The majority (60 per cent) thought that the Board of Directors at Blue Shield should include representation from groups other than the medical profession. Slightly more than three-fourths of them felt that management should be represented on the Board, and just under three-fourths thought that labor should be represented.

5. Doctors feel that some supervisory control should be placed over the medical care provided

under medical insurance plans. More than half of them said that the medical profession should exercise these controls. Forty-five per cent said that a combined board of doctors and lay persons should handle these controls.

6. Committees to oversee the utilization of Blue Shield are favored by 75 per cent. There is little difference of opinion among those who favored utilization committees when answers from doctors were compared by the size of the communities in which they lived. In addition, the doctors felt that a utilization committee should be a standing function of county medical societies, and a little over one-third thought that hospital staffs should have that responsibility.

7. The majority of the doctors (83 per cent) did not believe that Blue Shield's medical service principal should be available only to people with incomes under \$5,000.

8. More than half of both the generalists and specialists agreed that Blue Shield should not offer a contract which would include all professional services.

9. If out-patient diagnostic benefits were added to Blue Shield contracts, almost half of the doctors felt that this benefit should be paid when treatment was given in a doctor's office. About 10 per cent fewer doctors felt that payment should be made only when the service was provided in hospital out-patient departments and certified laboratories.

10. Just about three-fourths of the doctors believe that insurance benefits should provide for consultation. Ten per cent more specialists believed this than did general practitioners.

11. Doctors were divided about half and half on whether the present 24-hour limitation on first aid treatment should be increased. Two-thirds of those who favored it thought it should be increased to 48 hours.

**NOTE:** These are the opinions of the members of the Michigan State Medical Society on prepaid medical care plans. One-third of those answering the questionnaire were general practitioners, 13 per cent were internists, and 12 per cent, surgeons. The remaining doctors who answered the questionnaire were identified with seventeen other specialties. One-third of the doctors lived in cities with a population of more than half a million. Six per cent lived in cities of less than 2,500 people. Eighty per cent of the doctors who returned the questionnaires participate in at least one of the two Blue Shield contracts, and 68 per cent participate in both Blue Shield income-limit contracts.

12. A majority of the doctors do not believe that Blue Shield should offer hospital coverage on an indemnity basis, nor do they believe that Blue Shield should offer such things as life insurance, disability protection, etc., as well as medical service coverage in the policies.

13. Because of present economic conditions, 60 per cent of the doctors recommended that the present \$5,000 income limit be raised along with a higher-fee schedule for the contract.

14. One-third of the doctors recommended that a \$7,500 income-limit contract be added to the \$5,000 and \$2,500 contracts which are already offered.

15. Sixty-eight per cent favored a new \$7,500 income limit contract providing the present \$5,000 fee schedule was raised by 32 per cent and then used as the \$7,500 fee schedule.

16. A majority (70 per cent) feel that the present \$2,500 contract should not be eliminated, nor do they believe that the \$2,500 contract should be continued as an indemnity to serve as basic coverage for larger income groups.

17. A resounding majority (83 per cent) said they did not object to reporting their total charges for each case on the service report form submitted to Blue Shield.

18. Sixty-three per cent feel that the most important factor in determining their fees is to follow the "usual" fee in the community as representing the value of the services rendered, whether it is a non-insured patient or one who has Blue Shield but has an income greater than the income limits of his contract.

19. A majority of the doctors (65 per cent) feel that the Blue Shield should be raised on a selective basis, and 69 per cent feel that Blue Shield should adjust its premiums and fee schedules as living costs vary.

20. Of the general practitioners, 90 per cent do not advocate a difference in the fees paid by Blue Shield to generalists and specialists for the same category of treatment. Sixty per cent of the specialists feel there should be a difference in fees.

21. If the patient knows of the payment, 82 per cent of the doctors believe that assisting surgeons should be paid by Blue Shield. Ninety-two per cent of the generalists and 75 per cent of the specialists agreed to this. Of those agreeing, 47 per cent thought it should be paid in all hospitals, 42 per cent favored separate allowances for the assisting surgeon based on a percentage of the surgical fee paid to the surgeon in charge, 37 per cent favored separate allowances for the assisting surgeon on a flat rate based on major and minor surgery, and 35 per cent thought it should be paid only in hospitals without interns and residents.

22. More than half of the doctors said that their income has been increased by Blue Shield because of better collections.

23. Eighty-one per cent believe that their colleagues are dissatisfied with Blue Shield fees. More doctors in cities of 100,000-500,000 felt this way.

24. Slightly over half of the doctors felt that Blue Shield subscribers should receive a roster of participating doctors providing it can be done ethically.

25. Eighty-two per cent of the doctors stated that separate contracts should be offered by Blue Shield in addition to full pay policies, to permit the subscriber to buy a deductible or coinsurance policy.

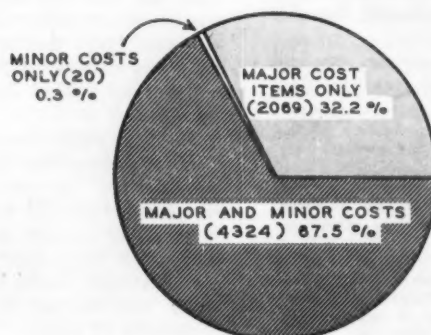
26. Eighty-one per cent personally believe that Michigan Medical Service is providing a satisfactory service to the public at present, but a majority of these think its service can be improved. However, 57 per cent believe that the public is not entirely satisfied with Blue Shield. Yet, on the other hand, the doctors believe that the subscribers are satisfied.

27. Eighty-eight per cent of the doctors believe that Blue Shield subscribers do not sufficiently understand their contract.

\* \* \*

The preceding Highlights Section was prepared especially for the September 23-24, 1957 meeting of the Michigan State Medical Society House of Delegates. In subsequent publications of the Study this section may be augmented.

## TYPE OF COVERAGE DESIRED



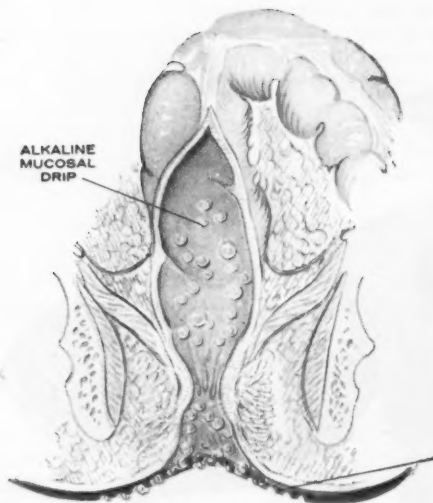


### **Successful appetite control begins in the supermarket**

If your overweight patient can resist the temptation to buy high calorie snacks, he's well on the road to successful weight reduction. You will find that one Dexedrine\* Spansule sustained release capsule taken in the morning controls appetite all day long—both at mealtimes and in the supermarket.

\*T.M. Reg. U.S. Pat. Off. for dextro-amphetamine sulfate, S.K.F.    †T.M. Reg. U.S. Pat. Off.





*Whatever the Rectal Pathology . . .  
Whatever the Etiology . . .  
Whatever Adjunctive Measures are Needed . . .*

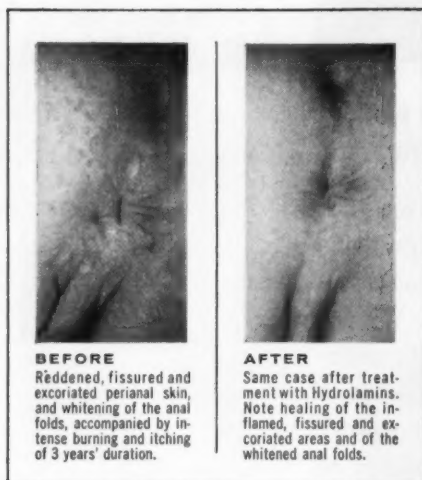
PRURITIC IRRITATION

First neutralize proteolytic enzymes<sup>1</sup> and alkaline mucosal drip<sup>2,3,4</sup> associated with **PRURITUS ANI**

*Provide immediate and prolonged relief in a high percentage of stubborn cases<sup>5,6</sup> with the natural biochemical buffer—*

## HYDROLAMINS®

TOPICAL AMINO ACID PRURITUS THERAPY



**BEFORE**

Reddened, fissured and excoriated perianal skin, and whitening of the anal folds, accompanied by intense burning and itching of 3 years' duration.

**AFTER**

Same case after treatment with Hydrolamins. Note healing of the inflamed, fissured and excoriated areas and of the whitened anal folds.

### *Why Effective —*

Hydrolamins-pH around 6—this enables it to buffer against the irritating alkaline mucosal secretions<sup>2,3,4</sup> with resultant rapid, prolonged, soothing neutralization.

### *Why Safe —*

Biochemical in its composition and having a hydrogen-ion concentration in harmony with normal skin, Hydrolamins—unlike steroids or "caine" type anesthetics—avoids treatment dermatitis. Hydrolamins actually encourages wound healing.

### *Hydrolamins Indications Include —*

Pruritus ani and vulvae . . . fissures . . . diaper rash . . . anal irritations and erythemas . . . pruritus due to pinworms . . . ileostomy and colostomy irritations . . .

1. Arthur, R. P. and Shelley, W. B.: A.M.A. Archives of Derm. 76:296 (Sept.) 1957.
2. Ehrlich, R.: Am. J. Proctol. 7:497 (Dec.) 1956.
3. Stocumb, L. H.: Am. J. Digest. Dis. 10:227 (June) 1943.
4. Bacon, H. E.: Anus-Rectum Sigmoid Colon, Diagnosis and Treatment, Philadelphia, J. B. Lippincott Co., 1949.
5. Bodkin, L. G., and Ferguson, E. A., Jr.: Am. J. Digest. Dis. 18:59 (Feb.) 1951.
6. McGivney, J.: Texas J. Med. 47:770 (Nov.) 1951.

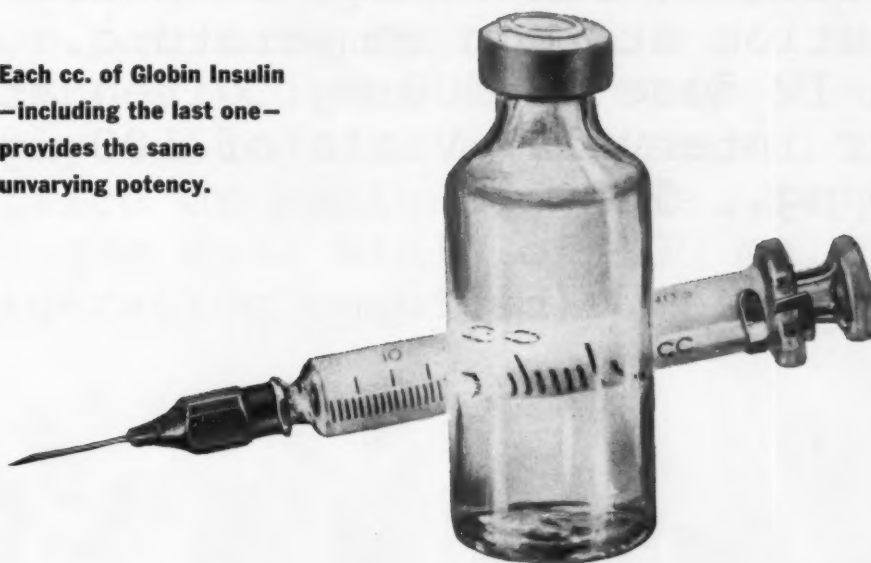
SUPPLIED: 1 oz. and 2.5 oz. tubes.



LEWAL PHARMACEUTICAL COMPANY Chicago 14, Illinois

## Avoid "BOTTOM OF THE VIAL" reactions

Each cc. of Globin Insulin  
—including the last one—  
provides the same  
unvarying potency.



Of the intermediate-acting insulins,  
only Globin Insulin is a clear solution.

24-hour control for the majority  
of diabetics

# GLOBIN INSULIN

## 'B. W. & CO.'<sup>®</sup>



BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, New York

**INTRAVENOUS** Compatible with common IV fluids. Stable for 24 hours in solution at room temperature. Average IV dose is 500 mg. given at 12 hour intervals. Vials of 100 mg., 250 mg., 500 mg.


# ACHRO

## THERAPEUTIC BLOOD LEVELS ACHIEVED

Many physicians advantageously use the parenteral forms of ACHROMYCIN in establishing immediate, effective antibiotic concentrations. With ACHROMYCIN you can expect prompt

**INTRAMUSCULAR** Used to start a patient on his regimen immediately, or for patients unable to take oral medication. Convenient, easy-to-use, ideally suited for administration in office or patient's home. Supplied in single dose vials of 100 mg., (no refrigeration required).

# MYCIN



Hydrochloride  
Tetracycline HCl Lederle

**IN MINUTES -- SUSTAINED FOR HOURS**

control, with minimal side effects, over a wide variety of infections - reasons why ACHROMYCIN is one of today's foremost antibiotics.

LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK  
\*Reg. U.S. Pat. Off.



---

Michigan State Medical Society

Dear Doctor—

Pleased to be a member of the Michigan Health Team. Look for the decal on the front door of these progressive and cooperative stores.



FOR THE ENTIRE RANGE OF RHEUMATIC-ARTHRITIC  
DISORDERS—from the mildest  
to the most severe

many patients with MILD involvement can be effectively  
controlled with

**'MEPROLONE'**

many patients with MODERATELY SEVERE involvement  
can be effectively controlled with

**'MEPROLONE'**

and NOW for patients with  
SEVERE involvement



MULTIPLE COMPRESSED TABLETS

**'MEPROLONE'**

The first meprobamate-prednisolone therapy

the one antirheumatic, antiarthritic that  
simultaneously relieves: (1) muscle spasm  
(2) joint inflammation (3) anxiety and  
tension (4) discomfort and disability.

**SUPPLIED:** Multiple Compressed Tablets  
in three formulas: 'MEPROLONE'-5—  
5.0 mg. prednisolone, 400 mg. meproba-  
mate and 200 mg. dried aluminum hy-  
droxide gel. 'MEPROLONE'-2—2.0 mg.  
prednisolone, 200 mg. meprobamate and  
200 mg. dried aluminum hydroxide  
gel. 'MEPROLONE'-1 supplies 1.0 mg.  
prednisolone in the same formula as  
'MEPROLONE'-2.



**MERCK SHARP & DOHME**  
DIVISION OF MERCK & CO., INC.  
PHILADELPHIA 1, PA.

'MEPROLONE' is a trademark of Merck & Co., Inc.



# Meat...

## in the congestive phase of cardiac disease

Meat fits well into the moderate-protein, restricted sodium, acid-ash diet currently recommended for many patients with congestive cardiac failure.<sup>1</sup>

The protein of meat—in the proportionate arrangement of its essential amino acids—closely approaches the quantitative proportions needed to promote human tissue synthesis and repair. For this reason lean meat proves important in maintaining positive nitrogen balance without excessive protein intake.

The sodium content of meat prepared without added salt is relatively low. Per 100 grams, beef muscle meat shows approximately 50 mg. of sodium, lamb 90 mg., pork 60 mg., and veal 50 mg.<sup>2</sup>

The acid ash of meat aids in the promotion of diuresis.

The easy digestibility of meat is a prime requisite of foods specified for the patient with congestive cardiac disease.

In addition to these important features, meat contributes other nutritional factors essential in any convalescence—the B vitamins thiamine, riboflavin, niacin, pantothenic acid, B<sub>6</sub>, and B<sub>12</sub>, and the minerals iron, phosphorus, potassium, and magnesium.

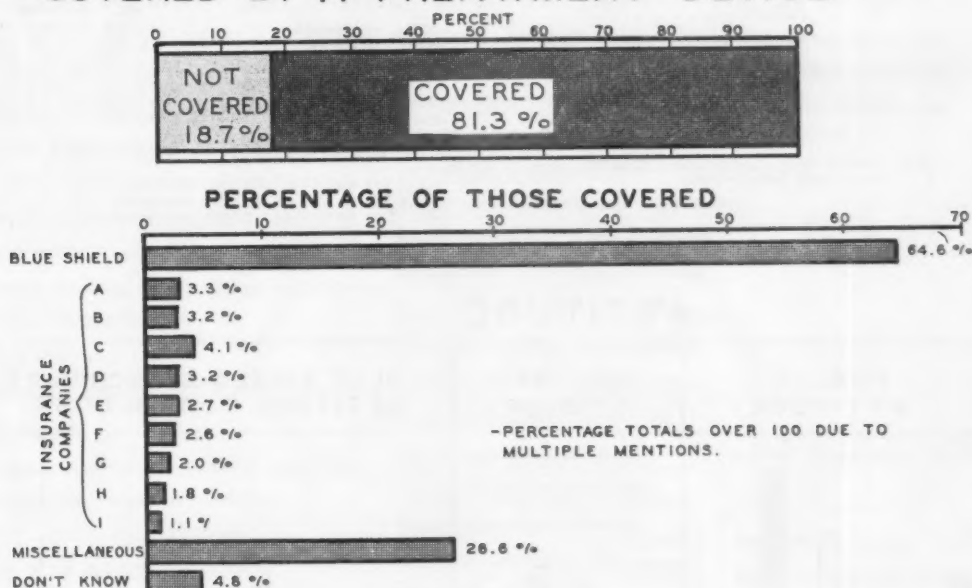
1. Odell, W. M.: Nutrition in Cardiovascular Disease, in Wohl, M. C., and Goodhart, R. S.: Modern Nutrition in Health and Disease, Philadelphia, Lea & Febiger, 1955, p. 699.

2. Bills, C. E.; McDonald, F. G.; Niedermeier, W., and Schwartz, M. C.: Sodium and Potassium in Foods and Waters, J. Am. Dietet. A. 25:304 (Apr.) 1949.

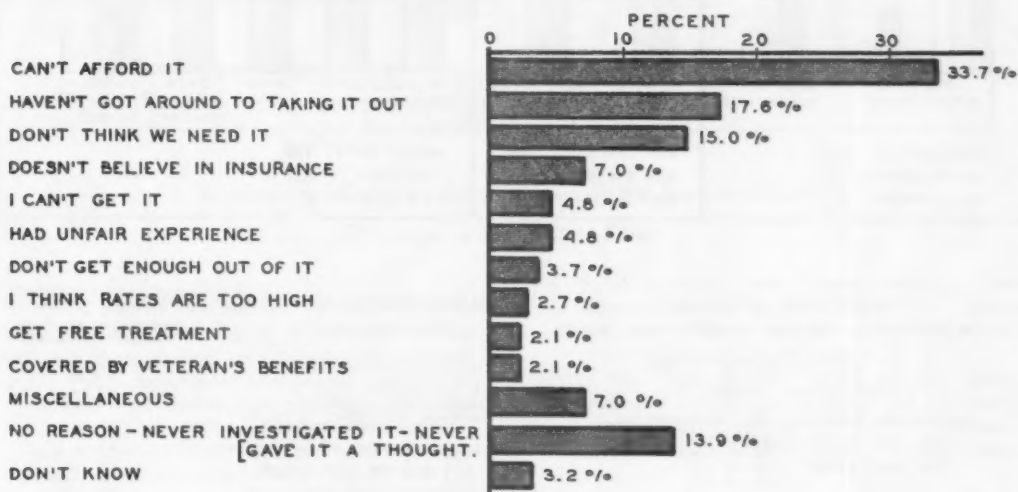
The nutritional statements made in this advertisement have been reviewed by the Council on Foods and Nutrition of the American Medical Association and found consistent with current authoritative medical opinion.

**American Meat Institute**  
Main Office, Chicago...Members Throughout the United States

# PERCENTAGE OF PERSONS IN MICHIGAN COVERED BY A PREPAYMENT DEVICE



## NO COVERAGE BECAUSE:



- PERCENTAGE TOTALS OVER 100 DUE TO MULTIPLE MENTIONS.

# OPINION STUDY OF PREPAID MEDICAL CARE COVERAGE IN MICHIGAN

## COST FACTOR VS. WILLINGNESS TO PAY

(MONTHLY)

BLUE SHIELD SUBSCRIBERS BELIEVE THEY PAY	\$3.98
BLUE SHIELD SUBSCRIBERS ARE PAYING	\$2.83
ALL PERSONS INTERVIEWED ARE WILLING TO PAY	\$8.93

(ALL FIGURES AVERAGE FOR SINGLE, SELF AND SPOUSE, AND FAMILY PLANS)

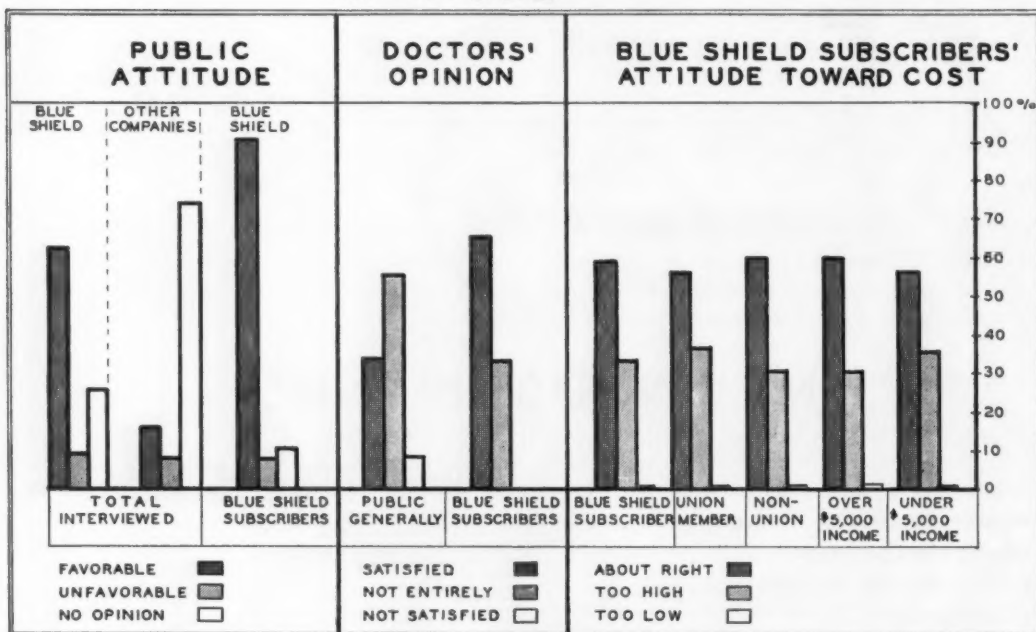
## IS A DEDUCTIBLE PLAN FAVORED?

	YES	NO
TOTAL RESPONSES	47.0%	53.0%
UNION MEMBERS	43.6%	56.4%
NON-MEMBERS	48.6%	51.2%
OVER \$5000 INCOME GROUP	51.4%	48.6%
UNDER \$5000 INCOME GROUP	41.9%	58.1%
DOCTORS	82.2%	17.8%

## HOW MUCH SHOULD BE DEDUCTIBLE?

FIRST \$25.00	47.7% OF RESPONSES
FIRST \$50.00	33.0% OF RESPONSES
FIRST \$100.00	11.5% OF RESPONSES

## ATTITUDE



## DOCTORS ATTITUDE

### BLUE SHIELD IS PROVIDING A SATISFACTORY SERVICE

YES	30.1%
YES BUT COULD BE IMPROVED	50.7%
NO	5.2%
NO UNLESS GREATLY IMPROVED	14.1%

### SUPERVISORY CONTROLS ARE NECESSARY\*

FOR BLUE SHIELD	YES 78.8%
	NO 21.2%
FOR BLUE CROSS	YES 85.4%
	NO 14.6%

\* (ESTABLISH POLICING COMMITTEES ON COMMUNITY LEVEL UNDER COUNTY MEDICAL SOCIETIES)

## SUBSCRIBER AWARENESS OF CONTRACT BENEFITS

### BENEFITS INCLUDED

### SUBSCRIBERS BELIEVING BENEFITS INCLUDE

SURGICAL BENEFITS	95.6%
OBSTETRICS	93.9
X-RAY DIAGNOSTIC	83.6
MEDICAL VISITS IN HOSPITAL	65.0
SURGICAL TREATMENTS IN DOCTOR'S OFFICE	27.8
EMERGENCY FIRST AID IN DOCTOR'S OFFICE	44.4

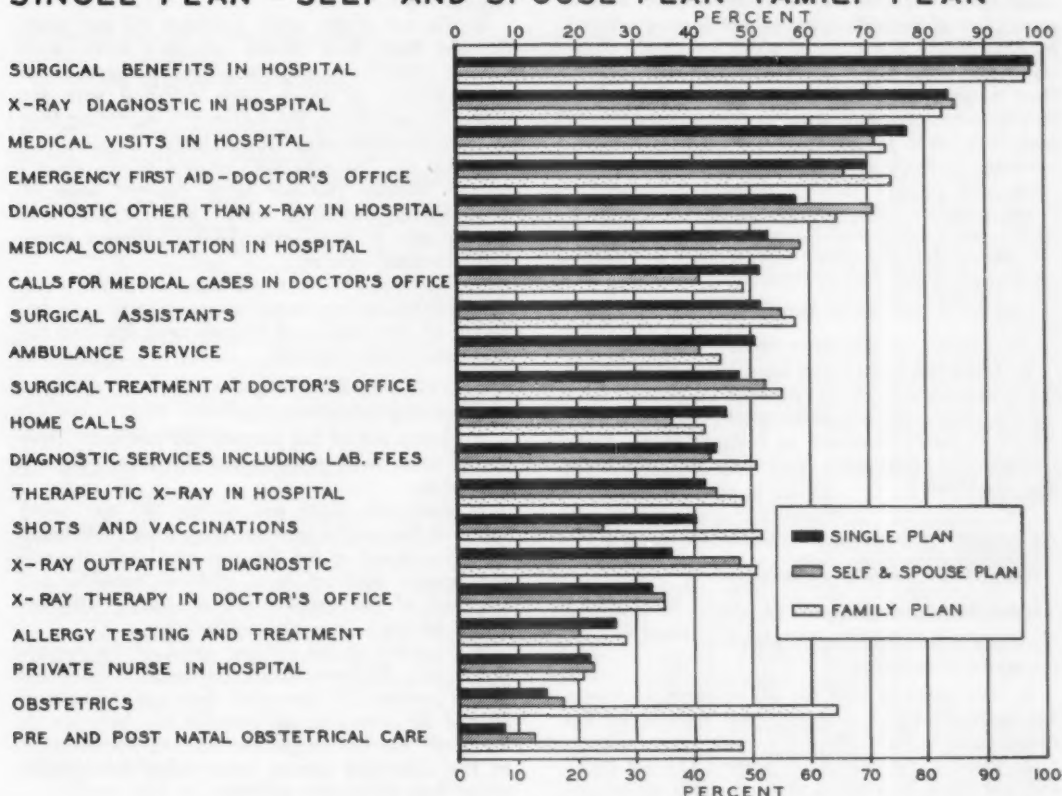
### BENEFITS NOT INCLUDED

DIAGNOSTIC OTHER THAN X-RAY	45.1%
SURGICAL ASSISTANTS	41.7
MEDICAL CONSULTATION	35.6
PRE AND POST NATAL OBSTETRICAL CARE IN DOCTOR'S OFFICE	34.3
X-RAY OUTPATIENT DIAGNOSTIC	31.8

## SUMMARY

# DESIRED BENEFITS

## SINGLE PLAN - SELF AND SPOUSE PLAN - FAMILY PLAN



## Summary

### Summary of Opinion Survey of Prepaid Medical Care Coverage and Related Costs

#### Who has medical-surgical protection?

1. Eight out of ten persons (81 per cent) in Michigan have some kind of prepayment device protecting them against medical-surgical expense.

(a) Of the occupational groups, skilled tradesworkers have the highest coverage—nine out of ten (91 per cent). Next highest are clerical and salespeople, eight out of ten (85 per cent), unskilled laborers eight out of ten (83 per cent) and professional and semiprofessional eight out of ten (83 per cent). Lowest coverage is found among retired, widows and unemployed with five out of ten (49 per cent).

(b) Coverage in rural and urban areas is nearly equal (urban 81 per cent, rural 80 per cent).

(c) Union members have higher coverage than nonmembers of unions, the former having nine out of ten (96 per cent), the latter seven out of ten (76 per cent).

(d) In the "over-\$5,000" family income group eight out of ten are covered (86 per cent) compared to seven out of ten (75 per cent) for the "under-\$5,000" family income group.

#### What company or plan provides the coverage?

1. Six out of ten persons (64 per cent) having medical coverage were subscribers to Blue Shield.

2. About two out of ten (18 per cent) of those covered by any plan were protected by more than one policy or contract.

# *Extent of awareness of benefits in contracts*

1. Blue Shield subscribers were asked their opinion on what benefits they thought were provided in their contracts. They were given a prepared list of benefits some of which were offered by Blue Shield and some of which were not. They were asked to select from this list the benefits they thought were included in the maximum Blue Shield contract. Following is the percentage of inclusions given for each benefit which is actually covered by the maximum Blue Shield contract:

Surgical benefits .....	95%
Obstetrics .....	93%
X-ray diagnostic .....	83%
Medical visits in hospital .....	65%
Surgical treatments in doctor's office (19 procedure) .....	27%
Emergency first aid in doctor's office .....	44%

Note: Anesthesia was included as part of the surgical benefit.

2. From the total listed benefits to be selected from, those which are not covered by present Blue Shield contracts, but which were mistakenly believed to be covered are as follows: (Only those benefits receiving more than a 30 per cent mention are listed.)

Diagnostic other than X-ray .....	45%
Surgical assistants .....	41%
Medical consultation .....	35%
Prenatal and postnatal obstetrical care in doctor's office .....	34%
X-ray out-patient diagnostic .....	31%

## *Opinions regarding monthly premiums for medical coverage*

1. The average cost for all monthly premiums for medical-surgical coverage was thought by the respondents to be \$6.25.

2. Nearly four out of ten persons (37 per cent) did not know how much their monthly or annual premiums amounted to.

3. Of the Blue Shield subscribers nearly three out of ten persons (27 per cent) did not know their monthly or quarterly premium cost. Of those who did answer, their average estimate was \$5.96 per month (all plans, single, couple and family, were included).

## *Estimates of amount of cost paid by employer*

1. Five out of ten persons (54 per cent) said they paid the entire cost of the medical-surgical coverage premiums. The employer was thought to have paid all the premium by two out of ten persons (16 per cent) and part of the cost of premium by three out of ten persons (30 per cent).

2. About 80 per cent of the employers paying part of the premiums paid half the cost with the employee paying the other half.

## *Are the cost of plans believed to be "about right," "too high," or "too low," considering the benefits provided?*

1. Of the single and widowed persons seven out of ten thought the cost of Blue Shield protection was "about right." Slightly fewer married persons, six out of ten (57 per cent) thought that the

costs were "about right." Three out of ten persons (28 per cent) in the divorced category thought that the cost of Blue Shield premiums were "about right."

2. Six out of ten union members (56 per cent) thought that Blue Shield premium costs were "about right." A slightly higher percentage of non-members of unions were satisfied with the costs, six out of ten (60 per cent) indicating they thought the costs were "about right."

3. Of the "over-\$5,000" income group, six out of ten persons (60 per cent) thought costs of Blue Shield premiums were "about right" and 57 per cent in the "under-\$5,000" income group held the same opinion.

4. Reactions of a small sample to the rates charged by various insurance companies vary between 55 per cent and 93 per cent thinking the costs were "about right."

## *Persons claiming benefits under medical-surgical coverage plans*

1. Seven out of ten persons (69 per cent) have called upon their prepayment device for benefit payments.

2. Just over eight out of ten (83 per cent) carrying the family contract have used their benefits. Seven out of ten (66 per cent) with the self and spouse contract have claimed benefits, and four out of ten persons (38 per cent) with the single contract have claimed benefits.

3. Five out of ten (48 per cent) of the persons under age 30 have claimed benefits. Eight out of ten persons (81 per cent) between the ages of 30 and 40 have claimed benefits and between six and eight out of ten (60 per cent to 75 per cent) of the older-age groups have called for benefits under their policies or contracts.

4. Thirteen per cent more union members have claimed benefits than nonmembers of unions.

## *The illnesses or injuries which resulted in benefit claims*

1. Of the persons claiming benefits (52 per cent of the total coverage) nearly two out of ten (18 per cent) did so for an illness or injury classified, by the respondent, as an emergency.

2. The next most frequently-mentioned reason for benefit claims was obstetrics (16 per cent) followed by observation (12 per cent). With the exception of tumor removal and broken bones, no other single illness category accounted for more than 5 per cent of the mentions.

## *Amount of medical-surgical expense covered by benefits*

1. Four out of ten persons (44 per cent) had had their entire medical-surgical expense covered during their latest compensable illness.

2. Nearly six out of ten persons (59 per cent) who made claims for compensable illness, had part of the medical-surgical expense paid by the Blue Shield or insurance company. Three per cent received no benefits and 3 per cent "didn't know."

## SUMMARY

3. Blue Shield paid all expenses 38 per cent of the time, part of the cost in 58 per cent of the cases and none of the cost in 1 per cent of the reported instances.

### *Amount of the cost of medical-surgical care paid by individual*

1. Of the persons whose medical coverage plan paid "part," "none" and "don't know" (37 per cent of the total number having compensable illnesses), the following amounts were paid by these individuals over and above the amounts paid for them by the insuring plan:

\$1.00—\$50.00	142
\$50.00—\$100.00	44
\$100.00—\$200.00	25
\$200.00—\$1,000.00	8

2. One out of ten of the respondents (12 per cent) to the question "How much of the cost of the medical-surgical expense did you pay?" did not know how much they had paid and one out of ten had one or more additional policies which covered remaining cost or more.

### *Medical-surgical items not covered by plan or insurance*

1. Although four out of ten persons (40 per cent) could not recall the medical-surgical items for which they had paid in excess of benefits received, three out of ten (31 per cent) had to pay for X-ray, 14 per cent for medication, 7 per cent for pre- and post-natal care, 6 per cent for anesthetic, and 6 per cent for laboratory fees. The remaining items had fewer than 4 per cent of the total mention.

### *Reasons for extra expense, above that paid by plan or insurance*

1. Three out of ten (34 per cent) paid the costs in addition to the amount paid by the plan or insurance, because the services were not covered in the policy or contract.

2. Four out of ten (44 per cent) paid the additional costs because the doctor's fee was more than the amount provided. Two out of ten (16 per cent) said that both noncoverage and higher doctor's fees was the cause, and one out of ten (12 per cent) didn't know.

### *Payment to doctor directly, or to patient*

1. In three out of four instances (76 per cent), the plan or insurance paid the doctor directly. One out of four (25 per cent), paid the doctor and was then reimbursed by the plan or insurance.

### *Extent of coverage in the past for medical-surgical care of those who are not now covered*

1. Of the persons not now covered, five out of ten (50 per cent) had been covered at one time and the same number believed they had never been protected.

### *Reasons for not now being covered*

1. "Can't afford it" headed the list of reasons

for not now being covered, with three out of ten (34 per cent) of the total mentions. One out of five (20 per cent) in the "over-\$5,000" income group cited this reason, and two out of five (42 per cent) in the "under-\$5,000" income group mentioned it.

2. "Haven't gotten around to taking it out" was cited by two out of ten (17 per cent).

3. "Don't think we need it" was mentioned by one out of ten (15 per cent).

### *Benefits desired by "family plan" respondents*

1. Of the benefits desired in the "Medical-Surgical Services in Hospital" category those cited most often were: surgical benefits 96 per cent, x-ray diagnostic 83 per cent, and medical visits in hospital 74 per cent. Of the remaining benefits listed each received less than 66 per cent mention.

2. Of the benefits desired in the "services in the doctor's office" category, that cited most often was "emergency and first aid," 75 per cent. Of the remaining benefits listed each received less than 57 per cent mention.

3. Forty-five per cent wished to have ambulance service added to the list of benefits and 42 per cent wanted home calls.

4. When the benefits desired were separated on the basis of whether the respondent's employer presently pays "all," "part," or "none" of the premium, relatively minor percentage differences were indicated for inclusion of selected benefits.

### *Monthly costs of premiums for benefits selected under full family coverage contracts or plans*

1. The average monthly premium cost for the benefits selected by those respondents wishing coverage for themselves and family was \$11.24. This figure varied by no more than \$1.00 per month, regardless of whether the average was taken from the replies of union members or nonunion members, the over- or under-\$5,000 income groups, or whether the employer of the respondent presently paid "all," "part," or "none" of the premium.

2. When asked to eliminate benefits that were least important in order to reduce the total monthly premium cost, eight out of ten persons (78 per cent) were willing to pay the costs for the benefits rather than to eliminate items.

3. The benefit receiving the highest percentage of mention for elimination was X-ray out-patient diagnostic. This was cited by one out of ten persons (8 per cent) of the total number of persons choosing the family plan. Five per cent would eliminate private nurse ten-day limit, with other benefits receiving even smaller percentage.

4. Monthly premium cost of the final selected plan (after eliminating certain coverages to bring the cost down) was an average of \$10.09 per month. Variations of this cost between union members and non-members, and between the "over-\$5,000" and "under-\$5,000" income groups was less than \$1.00 per month. A definite varia-

tion occurred with the "sixty-years-and-over" age group where the average was \$5.94.

*Benefits desired by "self and spouse" respondents*

1. Of the benefits desired in the "Medical-Surgical Services in Hospital" category those cited most often were: surgical benefits 97 per cent, x-ray diagnostic 85 per cent, medical visits in the hospital 71 per cent, and diagnostic other than x-ray 71 per cent. Of the remaining benefits listed each received less than 60 per cent mention.

2. Of the benefits desired in the "Services in the Doctor's Office" category those cited most often were: "Emergency and first aid" 66 per cent, and surgical treatments 53 per cent. Of the remaining benefits listed, each received less than 45 per cent mention.

3. Forty-one per cent wished to have ambulance service added to the list of benefits and 36 per cent wanted home calls.

4. When the benefits desired were separated on the basis of whether the respondent's employer presently pays "all," "part," or "none" of the premium, relatively minor percentage differences were indicated for inclusion of selected benefits.

*Monthly costs of premiums for benefits selected under self and spouse coverage contracts or plans*

1. The average monthly premium cost for the benefits selected by those respondents wishing coverage for themselves and spouse, was \$8.75. This figure varied by no more than \$1.00 per month regardless of whether the average was taken from the replies of union members or nonunion members, the over-or under-\$5,000 income groups, or whether the employer of the respondent presently paid "all," "part," or "none" of the premium.

2. When asked to eliminate benefits that were least important in order to reduce the total monthly premium cost, eight out of ten persons (77 per cent) were willing to pay the costs of the benefits selected rather than to eliminate items.

3. The benefit receiving the highest percentage of mention for elimination was x-ray out-patient diagnostic. This was cited by one out of ten persons (10 per cent) of the total number of persons choosing the self and spouse plan. Eight per cent would eliminate calls for medical cases in the doctor's office. Other benefits received even smaller percentages.

4. Monthly premium cost of the final selected plan (after eliminating certain coverages to bring the cost down) was an average of \$7.65 per month. Variations of this cost between union members and nonmembers, between the "over-\$5,000" and "under-\$5,000" income groups, and between the various age groups was less than \$1.00 per month.

*Benefits desired by "single" plan respondents*

1. Of the benefits desired in the "Medical-Surgical Services in Hospital" category those

cited most often were: surgical benefits 98 per cent, x-ray diagnostic 84 per cent, and medical visits in hospital 77 per cent. Of the remaining benefits listed each received less than 66 per cent mention.

2. Of the benefits desired in the "Services in the Doctor's Office" category that cited most often was: "emergency and first aid," 70 per cent. Of the remaining benefits listed each received less than 52 per cent mention.

3. Fifty-two per cent wished to have ambulance service added to the list of benefits and 48 per cent wanted home calls.

4. When the benefits desired were separated on the basis of whether the respondent's employer presently pays "all," "part," or "none" of the premium, relatively minor percentage differences were indicated for inclusion of selected benefits.

*Monthly costs of premiums for benefits selected under "single" coverage contracts or plans*

1. The average monthly premium cost for the benefits selected by those respondents wishing coverage for self only, was \$3.26. This figure varied by no more than 50 cents per month regardless of whether the average was taken from the replies of union members or nonunion members, the over- or under-\$5,000 income groups, or whether the employer of the respondent presently paid "all," "part," or "none" of the premium.

2. When asked to eliminate benefits that were least important in order to reduce the total monthly premium cost, nine out of ten persons (91 per cent) were willing to pay the costs of the benefits selected rather than to eliminate items.

3. The benefit receiving the highest percentage of mention for elimination was calls for medical cases at the doctor's office. This was cited by 3 per cent of the total number of persons choosing the "single" plan. Two and seven tenths per cent would eliminate x-ray outpatient diagnostic, 2.3 per cent would eliminate home calls.

4. Monthly premium cost of the final selected plan (after eliminating certain coverages to bring the cost down) was an average of \$3.12 per month. Variations of this cost between union members and nonmembers, between the "over-\$5,000" and "under-\$5,000" income groups, and between the various age groups was less than 50 cents per month.

*Should plans or insurance cover major costs of illness, or minor expenses, too?*

1. Six out of ten persons (63 per cent) felt that both major and minor costs should be covered by medical care coverage.

2. Nearly seven out of ten union members (68 per cent) favored coverage for both major and minor costs exceeding nonmembers in this respect by 7 per cent.

3. The "under-\$5,000" income group favored this coverage by 67 per cent, a margin of 6 per cent over the income group which earned in excess of \$5,000.

## SUMMARY

### *Attitude toward paying a deductible amount of the expense of each illness or disability, in order to reduce the monthly cost of coverage*

1. Five out of ten persons (47 per cent) favored paying a deductible amount in order to reduce coverage rates.

2. Four out of ten union members (44 per cent) in the "over-\$5,000" group favored this plan compared to five out of ten nonunion members (54 per cent) in the same income group.

3. A comparison of those in the "under-\$5,000" income group, indicated four out of ten union members (42 per cent) were in favor of deductible with the same number of nonmembers (41 per cent) favoring.

4. When the employer presently paid all of the monthly premium for respondents, nearly five out of ten persons (46 per cent) favored a deductible plan. When the employer presently paid part of the monthly premium, the five out of ten persons (49 per cent) favored the deductible feature. In cases where all the premium costs were borne by the respondent, five out of ten persons (47 per cent) favored a deductible feature.

### *Amount of deductible expense persons are willing to pay*

1. Of those favoring a deductible feature five out of ten (47 per cent) were willing to pay the first \$25.00 of the cost of each illness in order to reduce their monthly premiums.

2. Three out of ten (33 per cent) favored a \$50.00 deductible.

3. One out of ten (11 per cent) favored a \$100.00 deductible.

4. Of union members who favored the deductible idea, six out of ten (57 per cent) voted for the \$25.00 deductible, compared to four out of ten (42 per cent) of nonmembers of unions.

5. The "under-\$5,000" income group favored by five out of ten (56 per cent) the \$25.00 amount compared to four out of ten (41 per cent) by the "over-\$5,000" group.

### *Attitude toward methods of paying benefits, payment to doctor or insured*

1. Nearly eight out of ten persons (78 per cent) expressed the opinion that payment should be made directly to the doctor. Two out of ten (19 per cent) felt that the insurance or plan should pay the insured who in turn would pay the doctor.

### *Attitudes—favorable or unfavorable—toward Blue Shield plans*

1. Eight out of ten Blue Shield subscribers (81 per cent) had a favorable opinion of Blue Shield.

2. Of the total number interviewed, six out of ten (63 per cent), when asked their attitude toward Blue Shield, expressed a favorable opinion.

3. Six out of ten union members (66 per cent) expressed a favorable opinion of Blue Shield compared to an equal number (62 per cent) of nonmembers of unions.

4. Six out of ten persons (66 per cent) of those expressing an unfavorable attitude toward Blue Shield (19 per cent), did so because of rates. People in Wayne County felt more strongly (80 per cent) on this than did out-state residents (57 per cent).

5. Three out of ten (33 per cent) of those having an unfavorable feeling, gave "poor coverage" as their reason. Two out of ten persons (18 per cent) said that "poor claim paying record" was responsible for their unfavorable attitude.

### *Attitudes—favorable or unfavorable—toward insurance company plans*

1. Two representative companies were selected for this summary. The attitudes toward other companies were basically similar in both content and degree.

#### 2. Company A

(a) Nearly eight out of ten Company "A" policy holders (77 per cent) had a favorable opinion of Company "A."

(b) Of the total number interviewed, two out of ten (25 per cent), when asked their attitude toward Company "A," expressed a favorable opinion.

(c) Of the total number interviewed, one out of ten (12 per cent) had an unfavorable opinion of Company "A." Sixty-two expressed no opinion.

(d) Of the total number of those persons having an unfavorable attitude toward Company "A," five out of ten (54 per cent) thought that the Company "misrepresented the policy" and five out of ten (53 per cent) believed the carrier had a "poor claim paying record." Other categories of comment were "poor coverage," "high rates," and "lack of recognition by doctors and hospitals."

#### 3. Company B

(a) Five out of ten Company "B" policy holders (50 per cent) had a favorable opinion of Company "B."

(b) Of the total number interviewed, one out of ten (14 per cent), when asked their opinion toward Company "B," expressed a favorable opinion.

(c) Of the total number interviewed, one out of ten (10 per cent), had an unfavorable opinion of Company "B." Seventy-six expressed no opinion.

(d) Of the total number of those persons having an unfavorable attitude toward Company "B," five out of ten (56 per cent) thought the Company had a "poor claim paying record" and three out of ten (35 per cent) believed that the Company "misrepresented the policy." Three out of ten (32 per cent) gave "poor coverage" as the reason for their unfavorable attitude.

# Summary of Survey of Consumer Opinion on Medical Care Protection

This survey was undertaken in order to enable a very large number of Michigan citizens to express their views on medical-surgical coverage. By means of a mailed questionnaire to more than 60,000 households, this end was achieved.

Inevitably, the accuracy of this type of survey is factored by the relatively large number of persons who do not respond. This is not the case with the Opinion Survey of Prepaid Medical Care Coverage and Related Costs—a personal interview survey where 100 per cent response is obtained through individual contact. However, the two surveys herein reported do tend to support one another in their results, although in some instances to varying degrees. When such is the case, of course, the results of the interview survey is to be given preference over the mail Survey of Consumer Opinion on Medical Care Protection.

**Question 1.** *Do you have any kind of insurance or plan that pays all or part of your family's medical and surgical expenses?* Nine out of ten of the respondents indicated they did have some sort of medical expense coverage. A higher percentage of urban residents were covered than rural residents, 94 per cent versus 88 per cent. When percentage of coverage was compared between the over-\$5,000 family income group and the under-\$5,000 family income group the former registered 95 per cent, the later 89 per cent.

**Question 2.** *Would you indicate why you and your family are not now covered by medical-surgical insurance, if this is the case?* The most frequently mentioned reason for noncoverage was "too expensive" which accounted for 41 per cent of the answers. The next reason listed by 20 per cent of the respondents was "self reliant," those who were able to cover costs on a pay-as-you-go basis. Only 13 per cent were not covered because of previous unsatisfactory experience with insurance.

**Question 3.** *With what medical-surgical plan or insurance company are you or your family now covered in whole or in part?* Seven out of ten of the respondents were Blue Shield subscribers. Of those having medical-surgical coverage, 84 per cent had one contract or policy, 15 per cent had two, and one person had three policies.

**Question 3a.** *Is any part or all of the premium cost of this policy or policies paid by your employer?* Of the total insured, about 10 per cent had all of their coverage cost paid by their employer, 50 per cent had part of the cost paid, and 49 per cent had none of the cost paid by their employer. (Note: These percentages total more than 100 because some respondents had more than one policy.)

**Question 3b.** *Does this plan(s) cover Self Only, Husband & Wife, of Family?* Of six out of ten of the total insured carrying family protection, 25 per cent were covered for husband and wife, and 18 per cent were covered for self only.

**Question 4.** *Have you ever had to call upon your insurance company(ies) to pay benefits?* In answer to this question, 76 per cent of the people said they had used their medical insurance. A greater percentage of those insured under the Family Plan (84 per cent) received benefits than those covered under Single and Couple plans.

**Question 5.** *The last time you used your medical insurance, were there any medical or surgical expenses that were NOT covered by your insurance?* Of the 5,138 responses to the question, 61 per cent said that there were medical expenses not covered by insurance benefits when the policy was last used.

**Question 5a.** *What were the medical expenses not covered by your policy the last time you used your medical insurance?* Doctor fees were the largest single item mentioned as not being covered completely by respondents' medical-surgical insurance or plan. X-ray received 19 per cent of the total mentions. Other items requiring payment, over and above insurance benefits, were maternity 8 per cent, and anesthesia and office calls, both 7 per cent.

**Question 5b.** *About how much did you pay in extra medical expense the last time you used your medical insurance?* Twenty-three per cent of the respondents said they paid less than \$25.00 for extra medical expense and 18 per cent indicated they paid between \$26.00 and \$50.00, and 12 per cent between \$51.00 and \$75.00. Percentages of persons paying from \$75.00 to \$100 was just under 10 per cent.

**Question 6.** *The benefits normally covered by many medical insurance policies for services provided in the hospital are listed below. (These do not include hospitalization expenses). Such a policy would cost your family approximately \$5.00 a month or \$55.00 per year. . . . SURGICAL, FRACTURES AND DISLOCATIONS, MATERNITY, EMERGENCY FIRST AID, ANESTHETIC, X-RAY. Which of the following benefits would you MOST like to have ADDED TO THE COVERAGE OF THE ABOVE POLICY?* Of the total respondents, 5,731 answered this key question. More than 50 per cent wished to add x-ray benefits for outpatients—this item receiving the most mentions. Next highest noted for inclusion was emergency house calls, gaining 47 per cent of the total mentions. X-ray in the doctor's office received the next highest vote with 45 per cent. No other

## SUMMARY

benefit reached the over-40 per cent mark. In almost every case, the desire for additional benefits, over and above the typical basic coverage, was relatively equal when compared between respondents whose employers paid "all," "part," or "none" of the cost of their present. For example, under the category of Medical Treatment in the Doctor's Office, respondents whose employers paid "all" of the insurance premium voted 29 per cent for the addition of surgery in the doctor's office. This compared to a 31 per cent vote by persons whose employers paid part of the premium and 29 per cent of those whose employers paid none of the premium. When responses were compared by age grouping, there was no significant difference in their desire for added services. The top four benefits compared between members of farm, labor and business and professional organizations are as follows:

	Labor Per cent	Farm Per Cent	Business & Professional Per Cent
Emergency House Calls.....	45	21	32
Diagnostic Service (Doctor's Office) .....	42	18	34
X-Ray Out Patient (Hospital) .....	40	21	46
X-Ray Diagnostic (Doctor's Office) .....	36	18	39

When answers of the respondents were broken down according to income groups, those persons earning under \$5,000, percentagewise, wished to include more items than any other income group or membership group (farm, labor, or business, professional).

**Question 7.** *If the benefits you checked in question 6 were added to such a policy, how much increase in premium per month do you think you would be willing to pay?* The average increase that respondents indicated they were willing to pay for the benefits they had added to the original basic coverage in Question 6 was \$2.36. When average increases were taken from those persons whose employers paid "all," "part," or "none," the figures were \$2.72, \$2.10, and \$2.53 in that order. There was only a 50 cents per month difference between the lowest and highest averages of persons in the various income groups, from under \$2,500 to over \$7,000. Farm organization members were willing to pay the least monthly increase, \$1.61; labor topped the organization groups with \$2.79.

**Question 8.** *In order to keep down the premium cost of added benefits, would you want to drop any of the benefits normally included?* About three out of ten persons wished to eliminate some of the additional benefits originally selected. Of these items, maternity led the list with 18 per cent wishing to drop that benefit. Emergency first aid was next in line for exclusion, with 7 per cent eliminating.

**Question 9.** *In order to reduce the monthly cost of medical-surgical insurance would you favor pay-*

*ing a deductible amount of the expense per each illness or disability (similar to deductible feature of automobile insurance)?* Fifty-two per cent of those replying said "yes" and 48 per cent were opposed. Members of organizations favored paying a deductible amount for each illness, with labor being most strongly in favor, 64 per cent. Business, professional followed with 62 per cent and farm trailed with 54 per cent favoring the idea. Other breakdowns of responses according to income and amount of premium paid by employer showed little variation.

**Question 9a.** *If you do favor the deductible idea, how much deductible expense would you be willing to pay?* Of those favoring the deductible plan, 52 per cent were willing to pay a \$25.00 deductible amount. Thirty-six per cent favored paying a \$50.00 amount and 12 per cent preferred a \$100-deductible policy. Six out of ten of both farm and labor organization members selected the \$25.00 plan, while only four out of ten of the business, professional group did so. The under-\$5,000 income group preferred the \$25.00 plan by six to ten. Fewer in the \$5,000-\$7,000 group favored this amount and only 45 per cent in the over \$7,000 group selected this figure.

**Question 10.** *Should prepaid medical and surgical plans or insurance cover only the major cost items of an illness or operation, or should they cover all minor items as well?* Over 6,400 persons responded to this question, and nearly seven out of ten (67 per cent) believed that both major and minor costs of an illness should be covered. Three out of ten believed that only major costs should be covered. Complete breakdowns of the responses by income, occupation, and according to amount of premium paid by the employer showed little variation from the overall average reported in the preceding paragraph. When cross-tabulated according to organization memberships the results disclosed that the business, professional group were about evenly divided on the question. Farm Bureau respondents favored both major and minor by two to one. And eight out of ten of Labor members wished coverage for both major and minor costs.

**Questions 11, 12, 13, Description of Respondents.** A majority of respondents, 81.2 per cent, were males and 84.6 per cent were married. Thirty-seven per cent had no children, 40 per cent had one or two children. The majority of the sample were in the age groups between 25 and 53, with 6 per cent under 24 and 6 per cent over 64 years of age. About 20 per cent of sample resided in a city over 500,000 and equal percentage lived in a strictly rural area. Two out of ten came from towns with a population between 25,000 and 100,000 and 15 per cent from cities between 100,000 and 500,000. The most frequently mentioned family income was the \$5,000-\$6,999 group, next in order were \$2,500-\$4,999 (26 per cent) and \$7,000-\$9,999 (22 per cent).

An occupational breakdown of the respondents showed about 4 per cent retired and the same percentage of farmer and farm worker. Executive, professional accounted for about 25 per cent, white collar employees 20 per cent, and hourly-

rated workers 33 per cent. Eight per cent of the response of those belonging to organizations was in the farm group, 54 per cent, labor and 37 per cent business, professional.

### Summary of Survey of Doctor Opinion on Prepaid Medical Care Plans

#### *Respondent identification*

1. Three out of every ten doctors (35 per cent) answering the questionnaire said they were in general practice.

(a) Another third of the respondents were about evenly divided between internists (13 per cent) and surgeons (12 per cent).

(b) The remaining four out of each ten were identified with seventeen other specialties.

(c) Three out of ten (33 per cent) live in cities of over half a million population.

(d) Less than one out of ten (6 per cent) live in cities of less than 2,500 people.

(e) The other six out of ten were evenly divided in cities of 2,500 to 24,999 (19 per cent), 25,000 to 99,999 (21 per cent) and 100,000 to 500,000 (21 per cent).

2. Eight of every ten doctors (80 per cent) participate in at least one of the two Blue Shield contracts.

(a) Seven of those eight (68 per cent) participate in both Blue Shield income-limit contracts.

#### *Administration and supervision*

1. More than seven out of ten doctors (75 per cent) believe that the profession is qualified to solve the economic problems in present-day medical practice.

(a) The physicians over age 54 express a slightly higher (82 per cent) degree of confidence in this respect.

2. When asked who should administer the major medical and surgical prepayment plans in Michigan, three out of ten (33 per cent) specified, "qualified laymen retained by the medical profession," another three out of ten (30 per cent) said, "the medical profession itself," and three more out of the ten (28 per cent) said the medical profession and the commercial insurance companies should offer policies on a competitive basis.

(a) Less than one of the ten (8 per cent) believe that the field should be dominated by the insurance companies alone.

(b) Less than 1 per cent indicate a combined preference for governmental agencies and labor unions (.5 per cent and .4 per cent respectively).

3. More than six out of every ten (64 per cent) doctors believe the profession is not presently given sufficient voice at the local level in the determination of Blue Shield policy.

(a) Only five out of ten (50 per cent) believe the same is true on the state level.

(b) When this was broken down into age groupings, it was revealed that less than six out of ten (54 per cent) in the "over-54" group are dissatisfied with present conditions on the local level. Only four out of ten (43 per cent) in this same age group believe the same is true on the state level.

(c) Of all the doctors expressing dissatisfaction with present policy-making on the local level, half of them (49 per cent) indicate that more voice should be given to county medical societies.

(d) Four out of these ten (41 per cent) believe more voice should be given specialty groups.

(e) On the state level only four out of ten (43 per cent) favor increased consideration to county medical societies, and nearly half (46 per cent) say that specialty groups should have more voice in Blue Shield policy-making.

(f) On both the local and state levels less than one in ten (7 per cent) indicate a desire to see more voice on policy matters vested in the hospital staffs.

(g) All of these replies were then sorted according to home town population. In cities under 100,000 about six out of ten (59 per cent) favor the county medical societies and three out of ten favor the specialty groups. In cities over the 100,000 figure only three out of ten (32 per cent) indicated the county medical societies as their principal choice, and six out of ten (59 per cent) favor giving more voice to the specialty groups.

(h) The widest departure from an even balance in this respect was indicated in returns from cities having less than 2,500, more than eight out of ten (84 per cent) favor more voice given to county medical societies, as opposed to only one out of ten (15 per cent) designating the specialty groups.

4. Seven out of each ten respondents (73 per cent) believe that the Blue Shield Board of Directors should continue to be elected by the MSMS House of Delegates.

(a) Only in the "over-50" age group did this percentage vary, and in this case it increased to eight out of ten (80 per cent).

(b) Of the 27 per cent who did not believe the Board of Directors should continue to be elected by the House of Delegates, six out of ten respondents (61 per cent) feel such election should be a function of county medical societies.

## SUMMARY

- (c) Two out of ten (17 per cent) indicate specialty groups, and the remaining two out of ten are equally divided between hospital staffs (8 per cent) and councilor districts (8 per cent) in their choices.
- (d) Preferences were broken down into population groupings. In cities of under 100,000, seven out of ten "votes" (70 per cent) were for county medical societies with one out of ten (13 per cent) indicating the specialty societies.

- (e) In cities of over 100,000, only six out of ten (61 per cent) indicated the county medical societies, while two out of ten (22 per cent) favored the specialty groups.

5. Six of every ten doctors (60 per cent) believe that the Board of Directors of Blue Shield should include representation from groups other than the medical profession.

- (a) This ratio changed little when broken down into age groupings. Only in the "over-54" group did this drop, and in that instance to about five out of ten (54 per cent).
- (b) Nearly eight out of ten (76 per cent) believe that management should be represented on the Board of Directors.
- (c) Seven out of ten doctors (71 per cent) believe that labor should also be represented.
- (d) Oral surgeons and osteopaths are the next choices, with 18 per cent and 17 per cent, respectively.
- (e) One in ten (11 per cent) indicate they believe state government should be represented.

6. When asked whether some supervisory controls should be placed over the rendering of medical care under insurance or service plans, eight out of ten doctors (79 per cent) said, "yes."

- (a) More than half of these (53 per cent) state that such controls should be exercised by representatives of the medical profession.
- (b) About four out of ten (45 per cent) say a combined board of lay persons and doctors should handle such controls.
- (c) Less than 1 per cent believe that governmental agencies should perform this supervision.
- (d) In answer to, "Where should the controls be exercised?" four of ten (38 per cent) say, "On the doctor," three (32 per cent) say "On the hospital," and three (30 per cent) say "On the patient."

7. Blue Shield utilization committees on the community level are favored by seven out of ten doctors (75 per cent).

- (a) Little variation from this ratio was found when these replies were sorted according to population, age and "generalist-specialist" groupings.
- (b) Six out of ten doctors (59 per cent) believe that such a committee should be a standing function of county medical societies.
- (c) Three out of ten (34 per cent) say hospital staffs should have that responsibility.

8. More than four out of ten doctors (44 per cent) object to the present necessity of asking their Blue Shield patients about their income status in order to make proper charges to under-income patients.

- (a) More than seven out of ten (73 per cent) doctors say they would not object to having their Blue Shield patients sign "claim forms," and 90 per cent of these say they would not object if their patients were required to indicate their income status on the doctor's reporting form.

- (b) Six out of ten replying doctors (61 per cent) want Blue Shield to inform the doctor of the income category of the patient, such as with varicolored cards.

9. As reported under the heading "payment for services" later in this summary, the doctors were asked to give their opinions regarding Blue Shield policy as related to osteopaths. The 412 physicians who, by their answers to that broad question, indicated that osteopaths should be permitted to become participating physicians (two out of each ten answering the question), were then asked whether they thought osteopaths should be represented on the Blue Shield Board of Directors. Of that number, nearly eight out of ten (76 per cent) agreed that they should.

10. Slightly less than half (48 per cent) of the doctors believe that Blue Shield subscribers should be provided with rosters of participating doctors, even if such could be done ethically.

- (a) This was broken down by population groupings, where highest approval of such a proposal, six out of ten doctors (60 per cent), was found in the "less-than-2,500" group and the lowest ratio was four out of ten (44 per cent), found in the "25-34" group.
- (b) Five out of ten (53 per cent) in the "over-54" group approved.

11. Seven out of ten doctors (72 per cent) say that they would actively oppose the institution of closed panel types of practice in their community, such as is currently being undertaken in Detroit.

- (a) Two out of ten doctors (17 per cent) say they would ignore it.
- (b) One out of every twenty-five doctors replying (4 per cent) state they would join and support such a plan, if proposed in their community.
- (c) This question was sorted into population groupings and by type of practice.
- (d) The percentage of those who would oppose such a plan remains about the same in all size cities, except in the "100,000-500,000" ones, where it increases to eight out of ten (79 per cent).
- (e) The largest areas of support for such plans lie in the "under-2,500" (5.8 per cent) and the "over-500,000" (5.7 per cent).
- (f) The ratio of opposition and support for such plans, when broken down into generalists and

## OPINION STUDY OF PREPAID MEDICAL CARE COVERAGE IN MICHIGAN

specialists, remains the same as on the over-all level.

12. Four out of ten doctors, (39 per cent) believe that the medical profession, through Blue Shield, should not contract with the government to supply coverage for special groups, such as with Medicare.

(a) Three out of ten (28 per cent) believe they should, but only on the state level.

(b) Two out of ten doctors (23 per cent) think such contracts should be on the local level.

(c) One out of every ten (10 per cent) prefer the federal level for such contractual arrangements.

13. Six out of ten physicians (59 per cent) favor increasing MSMS dues, if necessary, to provide for means and facilities to carry on continuous economic studies on health insurance and allied matters.

### *Service vs. indemnity*

1. Two out of ten physicians (17 per cent) believe that the Blue Shield's medical service principle should be available only to low-income groups, with income less than \$5,000.

(a) Eight out of ten (83 per cent) do not believe that the service principle should only be available to those low income categories.

2. Four out of ten doctors (41 per cent) stated that Blue Shield should be a service company.

(a) Less than two out of ten (16 per cent) believe it should be an indemnity company.

(b) More than four out of ten (43 per cent) did not indicate their preference between the two types of operations.

### *Changes in contracts*

1. More than four out of ten doctors (43 per cent) indicate that Blue Shield should offer a contract that would include all professional services rendered by any doctor of medicine.

(a) When this was sorted by type of practice the same ratio of generalists, four out of ten (43 per cent), agreed with the total group.

(b) The specialists were a little less inclined to agree (42 per cent).

2. The doctors were asked whether they believe benefits for medical consultations should be covered in Blue Shield contracts. These replies were sorted by type of practice.

(a) On the over-all compilation more than seven out of ten (74 per cent) feel that they should be.

(b) Fewer of the generalists, as a group, concur (88 per cent).

(c) More of the specialists, as a group, agree that they should be (78 per cent).

3. The doctors are divided about half-and-half (51 per cent and 49 per cent, "yes" and "no") on whether the present twenty-four-hour limitation on first aid treatment should be increased.

(a) Of the doctors who do favor an increase, six out of ten (62 per cent) recommend it be changed to forty-eight hours.

(b) Three out of those ten (32 per cent) feel it should be increased to "over 48 hours."

(c) Less than one out of ten (6 per cent) indicate a preference for a thirty-six hour limit.

4. Four out of ten (42 per cent) doctors think Blue Shield should not offer hospitalization coverage on an indemnity basis in addition to the present medical service coverage.

(a) More than three out of ten (33 per cent) feel it may possibly be advisable in the future.

5. Seven out of every ten (70 per cent) physicians do not believe that Blue Shield should arrange agreements with insurance companies, enabling them (Blue Shield) to offer the subscriber life, disability protection, and other types of insurance with the present service policies.

6. Little more than half (55 per cent) of the doctors believe Blue Shield should develop a variable premium system whereby high-utilization subscribers would be up-graded into a higher rate bracket.

7. More than seven out of ten doctors (72 per cent) agree that Blue Shield should provide "policy riders" in addition to the basic contracts, at specific extra rates for the additional coverages.

8. Eight out of ten doctors (82 per cent) believe that Blue Shield should offer separate contracts, in addition to "full-pay policies," as deductible or co-insurance policies.

9. In reply to whether Blue Shield should institute a system for post-payment for excessive major medical expenses whereby Blue Shield would pay the additional costs to the doctor and subsequently be repaid by the subscriber by an additional premium over a period of time, a little less than half of the replying doctors (49 per cent) said, "yes."

### *Income limits*

1. Three out of ten doctors (32 per cent) indicate satisfaction with the present \$5,000 fee schedule and would continue to accept it in full payment for services to under-income subscribers.

(a) Less than one in ten (7 per cent) would like to see the income limits raised, but desire to see the fee schedule remain unchanged.

(b) Six out of ten doctors (60 per cent) recommend raising the fee schedule as well as the income limits.

(c) When these replies were sorted according to population groupings, this pattern followed the same general ratio.

2. More than three doctors out of ten (34 per cent) say that Blue Shield should add a \$7,500 contract to the two now being offered the public.

(a) Two out of ten (19 per cent) believe that only a \$7,500 contract should be offered.

(b) Two more out of the ten (19 per cent) favor only the \$5,000 contract.

(c) The other three of the ten are divided between offering just the present \$2,500 one,

## SUMMARY

a new \$10,000 one (15 per cent) and something else, unnamed in the replies.

- (d) When these figures were sorted according to population groupings, all areas followed the pattern generally, except the "under-2,500" group, where nearly five out of ten (46 per cent) favored the issue of all three contracts, and only one in ten (13 per cent) felt only the \$5,000 one should be offered.

3. Seven out of ten doctors (68 per cent) favor placing the income limit in a new contract at \$7,500, providing the present \$5,000 fee schedules are raised by 32 per cent and used as the \$7,500 fee schedule.

4. Seven out of ten doctors (70 per cent) believe the present \$2,500 contract should not be eliminated from Blue Shield offerings.

5. Nearly six out of ten (56 per cent) do not believe that the \$2,500 contract should be continued as an indemnity contract, as basic coverage for larger-income groups.

### *Payment for Services*

1. Half of the doctors (49 per cent) replying to the questionnaire state that if Blue Shield were to add outpatient diagnostic benefits to its contracts, such benefits should be paid for when treatment is given in any doctor's office.

- (a) Four out of ten (38 per cent) suggest that payment be made only when treatment is in hospital outpatient department and in certified laboratories.
- (b) The remaining one out of ten respondents (14 per cent) would stipulate payment only when treatment is in the hospital outpatient department, and not in certified laboratories.
- (c) There was little deviation from this ratio when these figures were grouped by type of practice.
- (d) More than two out of ten doctors (24 per cent) list "x-ray, diagnostic" as the most important category of service to be paid for in any expansion of service benefits.

2. Four out of every ten doctors (41 per cent) do not believe that the "income limits" in the Blue Shield contracts should be dispensed with and a standard premium charged with a standard fee paid.

- (a) Nearly three out of ten (27 per cent) feel the opposite.
- (b) Nearly two out of ten (16 per cent) say "no," if no additional charge is permitted by participating doctors."
- (c) 12 per cent say "yes, if a higher scale of fees is paid to the specialist."
- (d) The greatest departure from this pattern of answers occurred when the replies were broken down by type of practice into generalists and specialists categories. Compared to the 12 per cent average of both groups, only 2 per cent of the generalists and 18 per cent of the specialists said, "yes, if a higher scale of fees is paid to the specialist."

3. When the doctors were asked if they would object to reporting their total charges for each case on the service report, eight out of ten (83 per cent) said, "no."

(a) This was sorted by population, age and type of practice groupings, and little deviation was noted from the average pattern.

4. More than six out of ten doctors (63 per cent) believe that the most important factor in their determination of their fees is, "the usual fee in the community as representing the value of the services rendered."

(a) Two out of ten doctors (21 per cent) say that "their personal evaluation of their professional ability" is the basis for setting their fees.

(b) The "economic potential of the patient to pay" is third with 14 per cent of the doctors indicating it as their determining factor.

(c) The "physician's years of experience in practice" is used by less than 3 per cent of the doctors as a basis for determining charges.

(d) When these figures were sorted by population, age and type of practice groupings, there was no outstanding deviation from this ratio.

5. More than six out of ten doctors (65 per cent) believe that Blue Shield fee schedules should be raised on a selective basis.

(a) Two of the ten (23 per cent) believe that they should be raised on a certain percentage basis across the board.

(b) One in ten (13 per cent) believe they are reasonable now.

(c) When these figures were sorted by population groupings the "under-2,500" cities reflected a 2-out-of-10 (21 per cent) ratio of doctors who feel fees are reasonable now.

(d) In the "over-500,000" cities, this dropped to less than one in ten (8 per cent).

6. Seven out of ten doctors (69 per cent) believe that Blue Shield should adjust its premiums and fee schedules as living costs vary.

(a) These figures were broken down into age groupings, but no general deviation from this ratio was indicated.

7. Four out of ten doctors (42 per cent) advocate a difference in fees to be paid by Blue Shield to generalists and specialists for the same category of treatment.

(a) When these were sorted by type of practice, only one generalist in ten (10 per cent) indicated that different fee schedules should be paid.

(b) Six out of every ten specialists (60 per cent) believe there should be a difference.

(c) Of all the doctors who think there should be a difference in fees, three out of ten (33 per cent) state it should be a flat 15 per cent increase to the specialist.

(d) Two out of each ten doctors (18 per cent) believe the increase should be 10 per cent.

(e) Three out of ten (33 per cent) believe that

some other arrangement beside a straight percentage should be adopted.

- (1) Of this number (e., above) three out of ten (29 per cent) state that the fee schedules should be raised on a uniform basis, on recommendations of the specialty boards.
  - (2) Two out of each ten (24 per cent) in this group believe fees should be raised, on a flexible basis, according to the skill, training and personal evaluation of the worth of the individual physician.
  - (3) One in each ten (11 per cent) in this group believe that the fee schedule adjustment should be flexible, according to the complexity of the treatment of the patient.
8. Three out of ten doctors (29 per cent) believe Blue Shield payments should be based on "no income limits, no fee schedules, with full payment to subscribers providing fees paid to doctors were in accordance with a satisfactory Relative Value Scale (like California's) adopted by county medical societies."
- (a) Five out of ten doctors (51 per cent) are equally divided in opinion for "fee schedules as an indemnity against the doctor's charge with no guarantee to the patient that benefits would cover the entire cost" and "fee schedules consistent with specific income levels."
9. Eight out of ten physicians (82 per cent) believe that assisting surgeons should be paid under Blue Shield contracts, if the patient knows of the payment.
- (a) When these figures were sorted by type of practice, nine out of ten (92 per cent) of the generalists felt this should be done.
- (b) More than seven out of each ten specialists (75 per cent) agreed.
- (c) Nearly half of those responding (47 per cent of the replies) indicate that payments should be made only if done in hospitals; and more than three out of ten (35 per cent) feel that payment should be made only if the work is done in hospital which has no interns and residents.
- (d) When the question was asked, "How should the fees be determined?" four out of five (42 per cent) said, "Separate allowance for the assisting surgeon based on a percentage of the surgical fee paid to the surgeon in charge."
- (e) Nearly four out of the ten (37 per cent) answered, "separate allowances for the assisting surgeon on a flat rate based on major and minor surgery."
10. More than five out of ten doctors (53 per cent) say that their income has been increased by Blue Shield.
- (a) Four out of ten (43 per cent) feel that their income has not been affected by it.
- (b) Four per cent of the doctors state that their income has been decreased by Blue Shield.
- (c) In the "under-2,500" cities, six out of ten doc-

tors (61 per cent) feel Blue Shield has increased their income.

- (d) In the "100,000-500,000" cities, sentiment is about half-and-half between an increase and a decrease of income, but no doctor from that size city said, "My income has not been affected by Blue Shield in any way."
  - (e) When broken down into age groupings, these figures show that in the "25-34" segment, only four out of ten (40 per cent) have benefited with increased income, and in the "35-54" group nearly six out of ten doctors (58 per cent) have gained because of Blue Shield.
  - (f) Generalists report a slight edge in this respect over specialists.
  - (g) When asked to give the reason for the increase of income, five out of ten doctors (51 per cent) say it was because of better collections.
    - (1) Less than one in ten (7 per cent) state it was because of additional patients.
    - (2) Four in ten (38 per cent) say "both."
11. Eight out of ten doctors (81 per cent) believe their colleagues are to some extent dissatisfied with Blue Shield fees.
- (a) Only in the cities of 100,000-500,000 size does this ratio change, where it amounts to more than nine out of every ten (95 per cent) feeling so.
- (b) When asked for comment, the most frequently mentioned (by 14 per cent of the respondents) was a listing of particular, individual procedures that should be raised. (Refer to the chart section in a later part of this report for a more complete breakdown.)
12. Five out of ten doctors (52 per cent) believe that where service is rendered by a non-participating physician, the Blue Shield payment should go directly to the doctor.
- (a) More than three out of ten (33 per cent) feel that payment should go to the patient.
- (b) The remainder say that no payment should be made for services rendered by any non-participating doctor.
13. Three out of ten doctors (30 per cent) believe that osteopaths should continue to be paid by Blue Shield under the same system as is now being used.
- (a) Slightly fewer (28 per cent) say that osteopaths should not be paid by Blue Shield.
- (b) Fewer still (26 per cent) think that the patients of the osteopaths should be paid, instead of the treating physicians.
- (c) These figures were sorted according to population and age groupings. The age of the respondents made little difference in their opinions on this question.
- (d) No deviation in ratio was noted in the population groupings except in the "100,000-500,000" cities. Here less than two out of ten (15 per cent) feel that Blue Shield should

## SUMMARY

continue to pay osteopaths as they do at present.

- (e) One out of ten (12 per cent) say osteopaths should not be paid at all.
- (f) About five out of ten (47 per cent) state the osteopath's patient should be paid directly.
- 14. Six out of ten (60 per cent) doctors believe that Medicare should continue as a plan where fees paid are in full payment for the eligible services.
- (a) Four out of the ten (40 per cent) believe it should continue as a plan where the fees paid are indemnity benefits toward the doctor's charges for eligible service.

### *Public relations:*

- 1. Eight out of ten doctors (81 per cent) believe that Blue Shield is providing a satisfactory service to the public at large.
- (a) Five of those eight also believe that Blue Shield's service can be improved, though.
- (b) Two out of ten believe Blue Shield is not providing a satisfactory service to the public.
- 2. Nearly six out of ten physicians (57 per cent) believe that the public is not entirely satisfied with the job Blue Shield is doing at present.
- (a) More than three out of ten (35 per cent) believe the public is satisfied.
- (b) These figures were broken down by population groupings, and no great deviation from this ratio was evidenced in different size cities.
- 3. Nearly seven out of ten doctors (67 per cent) believe that the Blue Shield subscribers are satisfied with the job Blue Shield is presently doing.
- 4. About seven out of ten doctors (67 per cent) believe that it would be a good idea for Blue Shield to notify the patient of the amount of money paid the doctor.
- (a) This was sorted by population groupings. In the "under-2,500" cities six out of ten doctors (63 per cent) agreed; in the "over-500,000"

cities seven out of ten doctors (70 per cent) felt this was a good idea.

- 5. Three out of ten doctors (29 per cent) believe that Blue Shield coverages and policies are sufficiently understood by the public.
- (a) About one in ten (12 per cent) believe that the subscribers understand Blue Shield.
- (b) More than five out of ten (54 per cent) believe that the medical profession understands Blue Shield.

### *Blue Cross*

- 1. Nearly nine out of ten doctors (86 per cent) feel that some nature of supervisory control over the utilization of Blue Cross is necessary.
- 2. More than seven out of ten physicians (72 per cent) do not believe the doctors of medicine are given sufficient voice in the determination of Blue Cross policies at the local level.
- (a) Six out of ten (64 per cent) think this same situation is true on the state level.
- (b) Eight out of ten (82 per cent) in cities of under 2,500 agree with this, on the local level; while nearly eight out of ten (79 per cent) think the same with respect to the state level.
- (c) Of the doctors who are presently dissatisfied with the voice given the medical profession on the local level, more than six out of each ten feel that more voice should be given the county medical societies.
- (d) On the state level, this figure drops to exactly six out of ten (60 per cent).
- (e) Nearly the same percentages of doctors on the local as well as on the state level feel that hospital staffs should have more voice in Blue Cross policy (15 per cent and 13 per cent, respectively).
- (f) Nearly twice as many doctors think that the Michigan State Medical Society should have more voice on the state level than on the local level (19 per cent and 12 per cent, respectively).

## Summary of Survey of Related Studies on Prepayment of Medical Costs

Surveys relating to the general subject of prepaid medical care plans, their coverages and costs, as well as surveys, revealing the same information on insurance, were obtained and reviewed. Of the twelve surveys which have been made in recent years in the United States, six contained information relating particularly to the subject involved in the total Opinion Study of Prepaid Medical Care Plans. The conclusions and analyses of these six surveys are contained elsewhere in this report. The following paragraphs are merely selected bits of information extracted from the more lengthy conclusions, to give a more concise picture of what others have found to be true when they investigated somewhat the same opinion areas as does this

study. This study cannot and did not go behind those surveys reviewed herein to evaluate their accuracy or relative authenticity.

### *Findings—general*

There is a deep interest by physicians in the whole question of health insurance.\*

Health insurance is growing and consumers are fairly ready to go along with this growth. In urban areas 70 per cent of the families are enrolled in some type of health insurance, and on farms, the figure is 45 per cent.

\*Throughout this summary the term "health insurance" is used as meaning any type of prepaid medical-surgical care coverage device.

Seventy-seven per cent of the families with health insurance purchased it through their work or through another employee group.

#### *Findings—coverage*

The public feels that health insurance is increasingly essential and basic, whether it is something to buy or as a legitimate social or occupational benefit. They are uncertain about the most desirable directions in which it should go. The people feel that present coverage seems adequate, especially when compared with the idea of having none at all. So consumers are not very vocal in demanding more coverage. However they do have various wishes, expectations and demands for having more of their health obligations insured. These are usually oriented toward having more of the doctor's bills paid, various specific increases and services, and toward more sharing of the burdens of drawn-out illnesses.

According to almost half of the physicians the main scope of benefits which should be offered by health insurance should be medical and surgical care in the hospital, and only a slightly smaller percentage feel that medical and surgical benefits should be confined to surgery only in a hospital. Generally speaking, general practitioners are more in favor of coverage anywhere while specialists tend to favor coverage for in-hospital services only.

#### *Findings—financial*

A deductible plan arouses mixed feelings; it is both attractive and doubtful, in the eyes of the public. Coinsurance (a plan wherein the subscriber pays a certain percentage of the expense each time the plan is used) sounds sensible and rewarding because it promises to assume a large portion of some vast expense.

Most physicians believe health insurance should cover only a "substantial portion," rather than the entire doctor's fee. Over 81 per cent are willing to accept insurance benefits as full payment of fees on behalf of the low income group, but less than 20 per cent are willing to do so for all insured patients, regardless of income.

Most physicians find that their patients assume that insurance payments will cover the entire professional fee. Major reasons for this misunderstanding are considered to be unclear policy statements, lack of satisfactory explanation by the salesman, and lack of comprehension by the insured.

The question of extra fees over and above the Blue Shield schedule (in Michigan, and perhaps elsewhere) is a serious and annoying one to many people and constitutes a major problem. The average policy holder does not understand his contract and nearly always expects more than the contract provides. An extra charge above the Blue Shield contract frequently begets more ill-will than it could possibly be worth. Unless there is an advance understanding the patient is apt to be annoyed and distrustful. On the other hand,

physicians often think the fee schedules are unrealistic and are upset when extra fees are not available or forthcoming. Medical societies recommend frank discussion of fees in advance with the patient to prevent complaints.

The total charges for all private personal health services in a single year (1955) were \$10.2 billion, divided percentagewise as follows: physicians, 37 per cent; hospital, 20 per cent; medicines, 15 per cent; other medical goods and services, 13 per cent; and dentists, 16 per cent.

The percentages of charges covered by insurance were as follows: hospitals, 50 per cent; all physicians, 13 per cent; surgery, 38 per cent; obstetrics, 25 per cent. Insured families received an average of \$45 each in benefits from insurance, covering 19 per cent of charges for all personal health services. The lower the income among families with insurance, the higher was the proportion of charges paid by insurance.

One-half of the families incurring charges for surgery and receiving insurance benefits had over 75 per cent of the charges paid by insurance, and one-half had less than 75 per cent paid by insurance. In like manner, one-half of the families incurring physicians charges for obstetrics and receiving insurance benefits had over 60 per cent of the charges paid by insurance, and one-half had less than 60 per cent paid by insurance.

#### *Findings—types of plans*

The plans with which the majority of physicians are in agreement as being most satisfactory to them are Blue Shield, private insurance, and consumer-sponsored cooperative plans, in the order named.

Almost three-fourths of the physicians are participating in some plan, with the highest percentage of participation by physicians in areas where combination service-indemnity plans predominate, and the lowest percentage where cash indemnity plans are most prevalent. The main reason given for not participating, by those physicians who do not, is lack of opportunity for participation in their area.

A majority of physicians believe that health insurance should be underwritten by all agencies on a competitive basis, and they feel that the medical profession should be represented by at least half the policy-making body of any plan approved by a medical society.

Of the organizational types of voluntary health insurance plans in the United States as of December, 1956, twenty-three were cash indemnity plans, twenty-eight service plans (full payment) and fifty-eight combination service-cash indemnity plans. Of the voluntary health insurance plans as of December 31, 1956, enrollment by type of benefit showed 29.8 per cent in cash indemnity plans, 2.6 per cent in service plans and 67.6 per cent in combination service—cash indemnity plans. (Blue Shield in Michigan is in the combination service-cash indemnity plan category.)

# Auricular Septal Defects

By Anthony C. Nolke, M.D.  
Detroit, Michigan

**T**HE MANAGEMENT of interauricular septal defects begins with recognition.

My reaction to many of these very technical presentations of heart defects often times is of complete deference to the excellence of the work, but how did all the patients so diligently studied get to the investigators in the first place? These babies and children were delivered and examined by physicians a number of times. Who first thought it was the heart that produced the subtle or manifest deviation from the normal course of this infant or child? How did he pick this patient out of his many others as a candidate for extensive technical investigation? It seems to me that this aspect of congenital cardiac defects has too often been lost in the fabulous picture of definitive diagnosis and surgical correction. The doctor on the firing line every day, the one who picks out the occasional misstep in the passing parade and earmarks him for cardiac workup, is tremendously important. This becomes especially important when the defect is extreme and manifests itself in early infancy.

What do we look for in examining a small infant or child? What makes us suspect this difficulty is of cardiac origin?

Tachycardia has been a very important early finding. One should expect a normal baby two or three days after birth to have a resting pulse below 125 per minute. A resting heart rate above this should arouse suspicion. Certainly, at several months of age, a rate above 125 per minute in an afebrile patient deserves rechecking and investigation.

Difficulty with feeding is a common early symptom. The act of sucking represents the greatest exertional load placed on a small infant. It is during this period that often the first signs of difficulty appear. Long resting periods during a feeding, twenty-five to thirty minute feeding periods, refusal of a complete formula, dyspnea and excessive perspiration during feeding, ex-

haustion following feeding, increasing vomiting—all these are characteristic of cardiac difficulty in the young patient.

Another common early complaint is rapid respiratory rate, noted particularly during sleep. Grandma may come up with this, along with her fifteen other comments, after several turns at baby sitting. Rapid respirations are usually accompanied by excessive perspiration, just as feeding may be.

Probably the most frequent early finding in a baby with cardiac difficulty is slow, poor weight gain. It may not be the first finding in many instances, but almost invariably presents itself. The practice of placing babies on a weight-height grid has led many of us to suspect difficulty when the other signs were not present or ignored.

Repeated respiratory infections are frequently observed in various types of congenital defects. Many of our young infants are first seen because of severe bronchitis or bronchopneumonia. The underlying cardiac defect is discovered subsequently. Also, in the young baby, the symptoms of cardiac failure are often mistaken for pulmonary infection.

I have not mentioned murmurs as an early finding in congenital heart disease. In the early postnatal weeks, murmurs due to incomplete and temporary extrauterine circulatory adjustments may be misleading. Later, the presence of a loud rasping murmur is a positive clue to an underlying defect, but unfortunately this occurs rarely. Equally unfortunate is the fact that many infants with congenital heart disease have no murmur in the first several weeks of life, but as pressure readjustments take place a significant murmur may become audible.

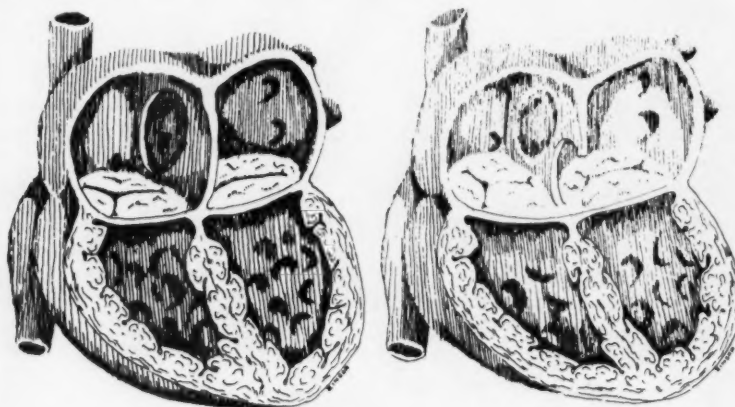
One of the more common causes for suspecting a cardiac anomaly in the nursery is cyanosis. However, most of the babies I see because of cyanotic episodes represent pulmonary problems, primarily—some with superimposed central nervous system involvement. One should keep in mind that cyanosis due to a heart defect rarely waxes and wanes, usually is not improved by

From the Department of Pediatrics, Wayne State University College of Medicine, and the Children's Hospital of Michigan, Detroit, Michigan.

placing the patient in oxygen, and gets worse on crying. Although these findings in infancy are those of cardiac disease in general, they may also

defects that do not involve the tricuspid or mitral valves nor involve the ventricular septum.

The clinical course of patients with auricular



Figs. 1 and 2

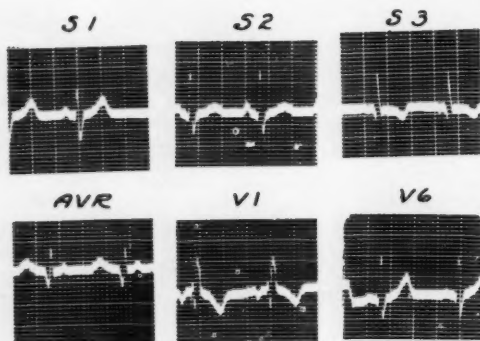


Fig. 3

be the first manifestations of an atrial septal defect.

What makes us then suspect an atrial septal defect is responsible for the patient's cardiac difficulty? What is the clinical picture of a patient with an atrial septal defect?

The so-called ostium secundum defect must be differentiated from the ostium primum defect. The secundum defect lies in the area of the fossa ovalis or upper portion of the atrial septum (Fig. 1). The primum defect lies just above the mitral and tricuspid areas, often involving both valve leaflets and in some cases the upper portion of the ventricular septum (Fig. 2). This defect is called by some persistent common atrioventricular canal. We are concerned here only with those auricular

septal defects covers an enormous spectrum from heart failure in infancy to almost no symptoms even in the later years of life. Despite this variation, let us try to piece together a perhaps not too atypical picture, since space will not permit us to review the panorama of symptomatology.

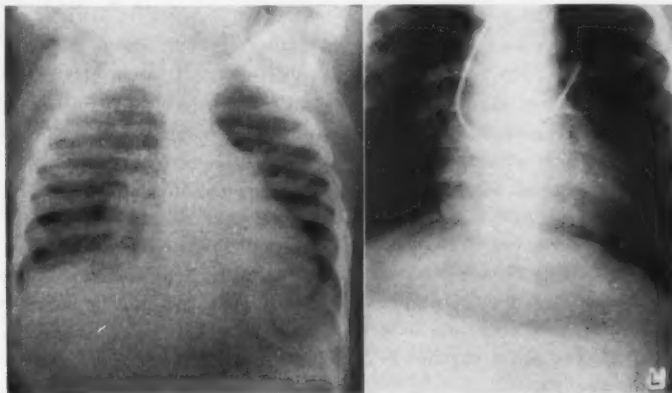
Let us imagine that a patient is referred to us, and that this patient is a seven-year-old girl; two out of three atrial septal defects will be in girls. She is thin and pale but not malnourished or emaciated. Her mother is worried because she cannot keep up with other children in activities and is always having one bad cold after another. Her child just isn't as well as her other children. Perhaps she heard the referring physician mention a murmur and is worried about rheumatic fever.

Historically, we hear nothing unusual about the birth or immediate neonatal period. The infant did fairly well the first few months but did not gain rapidly, was never chubby and had several respiratory infections before she was six months old. She may have even been hospitalized for pneumonia and placed in oxygen. Recovery was complete. Had a cardiac defect been noted at this time it would have been wise to use prophylactic medication. In our patient, the second six months of the first year were characterized more of the same—respiratory infections and slow weight gain, but other patients with a septal defect may develop symptoms of severe failure in this period. Unfortunately, it is almost impossible to make an accurate clinical diagnosis at this

# AURICULAR SEPTAL DEFECTS—NOLKE

time. Sometime after the first year the child improved, seemed less tired, played better, ate better and even gained weight. The following

cuspid ring. It does not appear early, usually, and may be confused with the murmurs of rheumatic fever.



Figs. 4 and 5

few years were neither good nor bad. She always seemed thin and pale, less vigorous than other children, and caught cold easily. She was seen by her physician at four years, who for the first time mentioned a murmur. It would probably be of moderate intensity and up along the left sternal border. Possibly he hoped it was functional. At any rate, the mother was able to manage fairly well for a while and did not require a return visit. When our patient started school, it became evident she could not do the things the other children did. She lagged behind them in play and was short of breath on only moderate exertion. Finally, the parents brought the child back to the physician. He informs us that on examination a forceful precordial impulse was apparent at this time but no thrill. He noted a moderate tachycardia, cardiac enlargement by percussion, and normal blood pressure—or perhaps some narrowing of the pulse pressure. A soft to moderate systolic murmur was heard, high along the left sternal border, first to third interspaces. This is not a loud, rasping murmur and is thought to be due to the increased amount of blood rushing through the pulmonary artery outlet. The pulmonary second sound is slightly accentuated but definitely split. This is sometimes best heard just below the systolic murmur. In addition he heard a basilar systolic and diastolic murmur that was of varying intensity and extended toward the apex. These murmurs are thought to be due to the large rush of blood through the enlarged tri-

The doctor obtained an electrocardiogram with unipolar leads and noted a right axis deviation and an incomplete right bundle branch block, an RSR' pattern in the right ventricular leads (Fig. 3). He probably also suspected a right ventricular hypertrophy. These findings are seen in at least 90 per cent of such patients.

Fluoroscopy and x-ray revealed the results of increased blood flow through the lesser circuit. The right atrium is enlarged, it is thinner walled and more easily distended than the left. The right ventricle also was enlarged. The pulmonary vasculature was engorged and expansile pulsations were noted in the hilar vessels. The pulmonary conus was enlarged but the aortic knob remained small (Fig. 4).

The family physician's examination was most thorough and his findings coincided with ours. Catheterization under these circumstances is practically mandatory and we proceeded to do this without further delay. During the procedure we were fortunate enough to pass the catheter through the defect in the septum to the left atrium and even into the pulmonary veins (Fig. 5). In the samples taken for oxygen content, we found a definite increase in oxygenation in the specimens from the right auricle as compared with the specimen from the vena cavae. This indicated to us that arterial blood is being shunted into the right atrium.

We have now obtained sufficient evidence to warrant surgical investigation with hope of repair.

# The Psychiatric Contribution to Geriatrics

K. McMorro, M.D., M.P.H.  
Detroit, Michigan

**P**SYCHIATRICS is the medical discipline devoted to the evaluation and management of the patient with disability. This is accomplished through the use of physical methods and the careful integration of paramedical services necessary to the psychiatric aim. In eighty-five per cent of patients, the psychiatrist needs only the assistance of the registered physical and occupational therapist. The remainder may also require speech and hearing services, medical case work skills, psychologic testing and vocational counseling.

This concept of the conscious evaluation of the abilities and disabilities of the patient is relatively modern in medical practice. The psychiatrist emphasizes the importance of the patient (the substrate) more than the disease. Both approaches are important, but physicians for generations have been disease-oriented rather than objectively patient-oriented. The art of medicine has been largely subjective.

The efficient management of the patient with long-term illness, including the geriatric patient, is only now in a developmental phase. A few years ago, as certain lay groups and physicians became interested, it was fashionable to devote a center or institute to a specific disease. More recently the concept of a center or institute to take care of general disability has become a vogue. Now the tendency is to return to the grass roots concept of medical care. Increasing numbers of hospitals are developing physical therapy departments because such treatment has become fashionable. All these approaches are necessary steps toward adequate care of the patient with long-term illness and disability.

Ideally, all the paramedical services necessary to the evaluation of the patient with chronic disease would be available to the practicing physician through the Department of Physical Medicine and Rehabilitation. This is analogous to Pathology and Radiology Departments which now offer their varied types of services to the physician. A Physical Therapy Department is not, however, a Physi-

atric Service. The former is considered a hospital service, the latter is a medical service which does include physical therapy.

To illustrate situations analogous to present trends and dislocations in psychiatric practice, it need only be remembered how very long psychiatrists struggled to get out of specialized hospitals and clinics into the general hospital and private office. It has taken men like Karl Menninger and Leo Bartemeier to convince physicians and legislators alike that patients with mental illness require medical treatment, not board and room in isolated institutional settings.

Another analogy lies in the experience of radiologists in practice thirty years. A time did exist for them when physicians felt quite competent to interpret the films taken by the technicians trained by the radiologist. That day is fortunately gone or present-day physicians would never have had the advances and advantages of the radiologic specialist available to them. Nor would the Iowa Courts only last November have judged radiology the practice of medicine. Fortunately, this decree continues the radiologist in his capacity as a medical consultant to physicians. The Radiology Department continues to function as a medical service rather than an economic function to the hospital as a "hospital benefit." At the moment, not an inconsequential number of physicians feel quite competent to use the technicians trained by the psychiatrist, and hospital fiscal officers and purchasing agents are equally as self-assured that their judgment in equipping a physical therapy department is above criticism.

These analogies are pointed out by way of introduction because one of the psychiatric contributions to geriatrics, and indeed to the medical profession, is the catalysis of the changing concept of medical management without (to quote MSMS Secretary's letter of February 18, 1957) "philosophies of practice contrary to those held by the medical profession to be most effective for the people."

There are fifteen million men and women who contribute themselves as geriatric patients today.

Presented before the Blackwell Society, March 14, 1957.

This huge number is a result of increased longevity, on one hand, and automatic retirement on the other. Whereas medicine has increased the numbers of older people in our society, our social planners have unintentionally introduced a subtle form of gericide. Persons forced into retirement do get sick and die. The geriatric patient is out of the swing of things. He is emotionally isolated and involuntarily dependent. The establishment of rapport is correspondingly difficult; but vital to successful management.

The medical and surgical problems encountered in the aging person include those in any general population and require similar treatment. However, removal from the home setting may have disastrous results. Hospitalization should be only for emergent care and never merely for the convenience of the physician and the family. Hospitalization should be terminated as quickly as possible. It is a severe psychic trauma for the older patient and at best may result in confusion which inhibits definitive care and at worst frank psychosis. The geriatric patient is similar to the pediatric patient. Both do best in familiar surroundings and with the least disturbance in routine.

There is no concrete evidence that barbiturates excite the elderly. It is possible that the administration of barbiturates coincides with the acute confusions and delirium which frequently accompanies the removal of an older person to a strange and stressful environment. Ethanol is a favorite and frequent adjunct for sedation among the aged. The newer rauwolfia and chlorpromazine derivatives have also been reported effective; but Parkinsonian syndromes are described as frequent complications. I am personally familiar with such effects in my own practice.

Improvement of the ventilation capacity is probably the most valuable contribution the physiatrist can offer to the geriatric patient. This is accomplished as follows: (1) Mobilization of periarthritic costovertebral joints; (2) hypertrophy of the expiratory musculature, ordinarily involuntary in action, but voluntarily forced in the emphysematous patient; (3) improvement of the power and co-ordination of the inspirational motors of ventilation, including the phrenic leaves. Inspiration efficiency influences the maximal breathing capacity and the residual volume with advantageous increase in tolerance to fatigue.

Asthmatic patients of long standing, the Parkin-

sonian, and the patient with rheumatoid spondylitis also deserves physiatric review of pulmonary function, especially the ventilation phase. Cardiac Work Evaluation Clinics could advantageously use the physiatrist. Besides evaluation of the work tolerance of the patient, the tolerance may be altered by mediating specific changes in the mechanics of ventilation. It is true that measurements of the diffusion capacity of the lung are still research tools. Nevertheless, the per cent of CO<sub>2</sub> and its effect on blood pH, which driven below 7.4 results in confusion and stupor, are considerations in senile emphysema; and it may be possible to improve oxygen saturation during exercise through more efficient use of the musculoskeletal system. Too frequently muscles imply only their function of power. The basic metabolic role including protein metabolism and nitrogen balance, carbohydrate metabolism and the high energy phosphate bond; and the effects of muscular action on pulmonary and cardiac efficiency by way of ultimate vena cava filling is seldom appreciated in a clinically integrated fashion except by the physiatrist.

Another fascinating problem met frequently in geriatric practice is that of senile osteoporosis. It is a result of physiologic or less often pathologic nitrogen catabolism which occurs in the bedridden or, more properly, the nonweight bearing patient. When bed rest is a necessity, joint range of motion can slow down the development of negative nitrogen balance but early ambulation is the treatment of choice. Where this is not possible, standing balance through the use of the standing table or tilting bed can be useful. In geriatric practice, the cessation of gonadal activity and derangement of the adrenal corticoids contributes markedly in the development of osteoporosis. This is especially true of the postclimacteric woman. As long as balanced adrenocortical activity replaces gonadal steroids, the osteoporetic changes do not readily occur. However, with lessening of adrenocortical secretion sufficient to maintain proper ratio between male and female hormones, osteoporosis does attain significance in geriatric practice. Nilevar® (Searle) has the anabolic factor retained while reducing androgenic effect in a ratio of 15:1. It has been a most satisfactory drug in facilitating positive nitrogen balance in the aged, and, except for withdrawal bleeding in women, has produced no complications. In fact, senile changes in the skin and mucous membranes have been reversed. These include an increased turgor and oiliness of the skin

and lessened friability of the mucosa, along with the more general reversal of nitrogen balance. (Personal observation.)

A word of caution should be extended at this point to those who keep the rheumatoid arthritic on prolonged cortisone and ACTH management. This kind of steroid therapy does produce osteoporosis similar to that seen in Cushing's syndrome and may result in pathologic fractures, especially in the thoracic vertebrae. Besides the concurrent pain, pulmonary ventilation is definitely reduced. The Taylor Back Brace so routinely prescribed in pathologic fractures of the dorsal spine has the unwelcome side effect of further immobilization of the costovertebral structures and concomitant reduction in pulmonary ventilation.

Osteoarthritis is a natural senile change. By the age of forty, all of us has begun to experience this condition in our knees and in the lumbosacral joint, at least in the roentgenogram. Obesity is a contributory factor. The lumbar lordosis is increased with shortening of the lumbosacral fascia, overstretching of the gluteus maximus, shortening of the hamstrings, and contractures of the hip flexors, including the tensor fascia lata, and overstretching of the abdominal muscles. In due time there is impingement on the nerve radicle with disabling muscle spasm and referred pain. A chair back brace is the usual prescription given by consultants dealing with low back disorders. It is worthless except where active postural compensation, including weight reduction, is also included in the management. Weight reduction introduces the psychic component present in obesity, and treatment may be difficult or impossible without psychiatric assistance and/or environmental manipulation. (Social case work.)

Another symptom-complex encountered with osteoarthritis given high etiologic status is the so-called cervical spondylosis. The patient who complains of shoulder pain or restriction should never be treated simply for bursitis, even with roentgenologic evidence to support such a diagnosis. Cervical films should also be taken and the kinesiology of the cervical muscles clarified. Too often a disabling periarthrititis of the shoulder does develop secondary to an unrecognized cervical spondylosis. The treatment in the latter instance is simply heat, range of motion exercises, and cervical traction. Generally for permanent arrest, the associated compulsive, perfectionist personality must be led into more useful ways of discharging tension.

Periarthritis of the shoulder is a frequent complication of coronary insufficiency and infarction. A daily X 3 complete range of motion passively will reduce this complication in the patient with coronary thrombosis. Fully developed, the loss of shoulder rotation results in severe functional disability. This includes inability to comb, brush or set the hair, fastening or unfastening the bra, even efficient use of toilet paper. Periarthritis results in severe reduction in self care and social assurance.

Peripheral vascular insufficiency is primarily a diagnostic problem for the physiatrist. Where arteriolospasm is severe, prolonged short wave diathermy to the low back to promote reflex vasodilation is the treatment of choice. The Syncardon, which synchronizes the arterial pulse in the extremity with the cardiac systole, may prove beneficial by dilating the circular medial coat of the arteriole. It is too recent a therapeutic instrument to recommend itself, though it has theoretic value.

Amputations of the extremities, cerebrovascular accidents and degenerative neurologic conditions with involvement of the total organism, both physically and psychically, require too detailed and specific management physiatrically to be discussed here. Patients with these kinds of disability are best referred to the physiatrist for management. Such patients really become psychiatric problems rather than geriatric.

Decubitus ulcers occur frequently in the older patient. Besides intensive management of protein balance including ambulation whenever possible, a daily minimal erythema dose of ultraviolet confined to the decubitus itself will promote healthy granulations. In varicose ulcers and dermatitis, histamine iontophoresis and stimulation electrically of the anterior tibial and calf muscles promotes healing by improving local blood supply and nutrition.

The treatment of fractures of the geriatric patient can be very frustrating. In those of the lower extremities, early ambulation is essential; but often the physiatrist cannot fit the timetable of the surgeon with that of the patient. The loss of vibration sense on the one hand and emotional insecurity on the other afford tremendous resistance to balancing and gait training. Also when the shoulder girdle power has been deteriorated through disuse, crutch walking will be impossible and if persisted in may result in an axillary nerve paralysis. Fractures of the upper extremities should be casted for as short a time in keeping with bone healing and

only necessary joints immobilized. Periarthritic changes and muscle atrophies occur quickly and often are not reversible despite the best physical treatment available.

Much disability could be mitigated if general hospitals would plan for longer hospital stays. There are excellent orthopedic reconstructive procedures available. These take time and, since they are "elective" surgery, the patient and the surgeon are kept apart by admission policies which are highly unrealistic. The same is true of patients who can respond with time to physiatric care. As more of us become aware of the problems to be solved in the management of chronic illness and disability including the mounting indirect costs, we will become more accepting of the apparent high direct cost of hospitalization. Then community pressures will bring about changes in present admission policies in our general hospitals. That time is still far in the future, but it will come.

When that time arrives, physicians will have become unanimously patient-oriented and the physiatric contribution will be a basic part of community organization and planning. Presently, clinicians and administrators of public health programs are busily working to solve the same problem, but from opposite angles. On the one hand, the clinician is concerned with better and more adequate care for his patient. This calls for new methods as well as extension and refining of the old. On the other hand, public health administrators are involved in various novel and untried plans to organize the community to handle long term illness. Sometimes these two basic approaches to the same problem are a source of misunderstanding and friction in the community. Only time and democratic implementation will result in improved understanding and care of the needs of our geriatric patient living with us in our changing social milieu.

## CHRONIC FUNCTIONAL CONSTIPATION

(Continued from Page 1399)

### Acknowledgments

The author acknowledges with appreciation the very useful technical help provided by Mr. Henry Mulder, hospital technician.

### References

1. Antos, R. J.: A new approach to the treatment of severe constipation. *Southwestern Med.*, 37:236 (Apr.) 1956.
2. Benagila, A. E., et al.: The chronic toxicity of Aerosol-OT. *Indust. Hyg. & Toxicol.*, 25:173 (May) 1943.
3. Cass, Leo J., and Frederik, W. L.: Doxinate in the treatment of constipation. *Am. J. Gastroenterol.*, 26:691 (Dec.) 1956.
4. Friedman, M.: Dioctyl sodium sulfosuccinate (Doxinate) in chronic functional constipation. *Am. Pract. & Digest Treat.*, 7:10 (Oct.) 1956.

5. Klein, H. C.: Fecaloma treated with dioctyl sodium sulfosuccinate. *Am. J. Digest. Dis.*, 2:37 (Jan.) 1957.
6. Marks, M. M.: *Am. J. Digest. Dis.*, 20:8, 1953.
7. Marks, M. M.: Treatment of constipation with a new evacuant. *Clin. Med.*, 4:151 (Feb.) 1957.
8. Middleton, Ramona J.: Dioctyl sodium sulfosuccinate in the postpartum management of bowel function. *West J. Surg.*, 65:31 (Jan.-Feb.) 1957.
9. Spiesman, M. G., and Malow, L.: Doxinate in the treatment of constipation. *Lancet*, 76:164 (June) 1956.
10. Tevetoglu, F.; Pediatric use of dioctyl sodium sulfosuccinate. *J. Pediat.*, 50:304 (March) 1957.
11. Towsley, H. A.: The constipated infant. *J. Michigan M. Soc.*, 54:1064, 1955.
12. Wilson, J. W., and Dickinson, D. G.: Use of dioctyl sodium sulfosuccinate for severe constipation. *J.A.M.A.*, 158:261 (May) 1955.

## TRACHEOTOMY

(Continued from Page 1404)

5. Fitz-Hugh, G. S., and Morgan, W. C., Jr.: The increasing indications for tracheotomy. *Laryngoscope*, 64:172-182 (March) 1954.
6. Fitz-Hugh, G. S., and Morgan, W. C., Jr.: Tracheotomy: indications and comments. *Eye, Ear, Nose & Throat Monthly*, 33:659-662 (Nov.) 1954.
7. Galloway, T. C.: Treatment of Respiratory Emergencies Including Bulbar Poliomyelitis. Monograph. Springfield, Ill.: Charles C Thomas, 1953.
8. Gray, J. S.: The physiology of respiratory obstruction. *Ann Otol., Rhinol. & Laryngol.*, 59:72-77 (March) 1950.
9. Harris, H. H.: Clinical evaluation of tracheotomy in respiratory complications of poliomyelitis. *Arch. Otolaryng.*, 56:385-404 (Oct.) 1952.
10. National Foundation for Infantile Paralysis: Man-

agement of Poliomyelitis With Respiratory Difficulty. New York: National Foundation, 1952.

11. Priest, R. E., Boies, L. R., Goltz, et al: Present status of tracheotomy in bulbar poliomyelitis. *Ann., Otol., Rhinol., & Laryngol.*, 60:468-484 (June) 1951.
12. Putney, F. J.: Complications and postoperative care after tracheotomy. *Arch. Otolaryng.*, 62:272-276 (Sept.) 1955.
13. Sjöberg, Anne: Respiratory obstruction in spino-bulbar poliomyelitis. *Acta Oto-Laryngol.*, 46:153-170 (March-April) 1956.
14. Von Leder, H.: Newer indications for tracheotomy. *Tr. Am. Acad. Ophthal. & Otolaryng.*, 56:52-61 (Jan.-Feb.) 1952.

# Wayne State University College of Medicine

## Sixth Annual Symposium on Blood

January 18-19, 1957

### FOREWORD

A Symposium on Blood is held at Wayne State University College of Medicine each year during the third week in January. It is a unique meeting where an attempt is made to be as informal as possible. Outstanding work related to recent developments is discussed. Papers are presented by investigators from all parts of the nation and usually there are some from overseas. Emphasis is placed on material commonly referred to as fundamental research. In the evening of the first day many of the participants foregather at one of the famous local restaurants for dinner and getting acquainted. The organizing committee consisted of Walter H. Seegers, Elwood A. Sharp and Paul Halick.

### AN ESTROGENIC PREPARATION AND CERTAIN COAGULATION FACTORS

By J. FREDERIC JOHNSON

*Department of Physiology and Pharmacology,  
Wayne State University, Detroit*

Intravenous estrogens are known to be effective for the control of hemorrhage from the upper respiratory tract, and other areas as well. An investigation was therefore undertaken to determine if there were any alterations of certain plasma factors involved in coagulation coincident with this procedure. Following intravenous administration of the estrogens in the dog and also in human subjects, there is a sharp, rapid rise in the plasma concentrations of prothrombin and Ac-globulin. Accompanying this rise, there is a fall in the anti-thrombin activity of the plasma. These changes would tend to enhance blood coagulation. Other factors, such as autoprothrombin I and II, platelet cofactor I, and fibrinogen, were also studied and slight changes in their plasma concentrations were noted. All the alterations accompanying the use of the estrogens persisted for several hours, paralleling the observed period of their clinical usefulness.

### RELATION OF STRESS TO HEMORRHAGE AND PROTHROMBIN TIME FOLLOWING ANTICOAGULANTS

By J. LOWENTHAL, L. M. FISHER and  
L. B. JAKES

*University of Saskatchewan, Saskatoon*

Rabbits were subjected to stress (insulin shock, hypertonic saline, frostbite) with and without anti-

coagulant pretreatment (Dicumarol, phenylindanedione, heparin). Pretreatment with indirect anticoagulants (Dicumarol, phenylindanedione), but not with heparin, increased significantly the incidence of hemorrhagic death compared to control groups receiving anticoagulant alone or subjected to stress only. Incidence of hemorrhagic death was found to correlate with a fall in hematocrit values. The increase in mortality from hemorrhage was found also in stressed rats when pretreated with anticoagulants. In rats, stress alone caused an increase in the one-stage prothrombin time. Addition of human serum or BaCO<sub>3</sub> adsorbed bovine serum to the plasma of stressed rats with a prolonged prothrombin time returned the values to normal. The failure of heparin to increase the incidence of hemorrhagic death (in rabbits) has been investigated. Heparin has been shown to interfere with some of the peripheral responses to stress.

### APPLICATION OF THYMOL TURBIDITY TEST FOR THE PREVENTION OF SERUM HEPATITIS

By E. R. JENNINGS, W. M. HINDMAN, B. ZAK,  
J. REED and O. A. BRINES

*Wayne State University and Detroit Receiving  
Hospital, Detroit*

During the past 30 months thymol turbidity tests have been performed on the serum of blood donors at the Detroit Receiving Hospital and the blood has been used without regard to the results of the test. The critical level of serum thymol turbidity which has been used in this study is 8 Shank-Hoaglund units. Donors whose serum thymol turbidity value has been in excess of 8 Shank-Hoaglund units have been called "high thymol" donors. There have been follow-up examinations on 193 recipients of "high thymol" blood. In this group there have been ten cases of serum hepatitis and five cases of possible hepatitis. In the control series of 603 recipients (recipients of blood from donors whose serum thymol turbidity value was normal or unknown), there has been no serum hepatitis and two cases of possible hepatitis. These data clearly indicate that the hazard of serum hepatitis is increased if blood is used from donors whose thymol turbidity value is in excess of 8 Shank-Hoaglund units. The feasibility of the use of this test for the screening of blood donors was discussed.

## SPHINGOSINE DISCOVERED AS PHYSIOLOGICAL INHIBITOR OF BLOOD CLOTTING

By E. HECHT

*State University of Utrecht, Utrecht, Holland*

Two different investigations led to the discovery of sphingosine as a physiologic inhibitor of blood clotting.

1. The endeavors to separate with the help of the paper chromatography the active principle from a lipid mixture, called lipid activator. The lipid activator gives before hydrolysis with phenol-water, four positive reactions with ninhydrin; after hydrolysis with sulfuric acid, however, only three, which were identified as glutamic acid, serin and ethanolamin. By treatment of the residue from the hydrolysis with NaOH, then, by chromatographic investigation, we obtained a substance that gives a positive reaction with ninhydrin with an RF-value of 90. On the same place before hydrolysis, a positive reaction was obtained with ninhydrin and we supposed that the substance in question formed an insoluble sulfate during the hydrolysis. The eluate corresponding with RF: 90, has inhibitor activity.

2. The second investigation was to verify the assertion of Chargaff that sphingomyelins are inhibitors of blood clotting. This was indeed so, but only with sphingomyelins giving a positive reaction with ninhydrin. On the basis of their chemical formulas, this was not expected. Purified sphingomyelins, giving no positive reaction with ninhydrin were indifferent in relation to clotting. The impure sphingomyelin chromatographically investigated gave a positive reaction with ninhydrin with RF: 90, and the eluate had also a clot-inhibiting effect. After hydrolysis, the positive reaction with ninhydrin disappeared. On the ground of these observations, we concluded that the substances giving the fourth spot on the chromatogram of the lipid activator and the impurity of the sphingomyelins were the same. We began to suspect sphingosine which is closely related to several lipids such as sphingomyelins or cerebroside. Sphingosine possesses a free  $\text{NH}_2$ -group and forms an insoluble sulfate. Indeed, chromatographic investigation of sphingosine, prepared from physiological material (cerebrin and sphingomyelin of pig brain), gave with ninhydrin the same reaction with RF:90.

The identification of the inhibiting substance as sphingosine was proved: (1) On the ground of the same RF-values with ninhydrin in consequence of a chromatographic comparison with 5 different developing solutions; (2) by the same characteristic clotting reactions with chicken plasma; and (3) by the agreement of these reactions with physiologic and synthetic preparations.

By investigations with nine different derivatives of sphingosine, it could be demonstrated that the complete molecule with the double bond and free

$\text{NH}_2$ -and OH-groups is required to give the following typical reaction with chicken plasma: Sphingosine, in very small concentrations prolongs the clotting time to forty hours or more. In the presence of the lipid activator we observed with sphingosine clotting times which are at most a little shorter than those with the lipid activator in optimal concentrations alone. The last named clotting times, however, are shortened to a sixth and sometimes to a tenth by addition of the lipid activator to chicken plasma incubated previously with sphingosine. This result is not obtained after incubation of the lipid activator with sphingosine so that a contribution from the plasma must be presumed.

A comparative investigation with the antithromboplastin of Tocantins, which he believes is increased abnormally in hemophilia, suggested that the essential principle of the antithromboplastin is sphingosine.

## EFFECTS OF PRODUCTS OF THERMAL DENATURATION OF THROMBIN PREPARATIONS ON ACCELERATION AND INHIBITION OF VARIOUS PHASES OF COAGULATION

By EDMUND KLEIN, SIDNEY FARBER and  
ISAAC DJERASSI

*From the Children's Cancer Research Foundation and The Tumor Therapy Group of the Division of Laboratories and Research, The Children's Medical Center and the Department of Pathology, Harvard Medical School.*

The thermal denaturation of preparations of bovine thrombin has yielded a water soluble material which promotes the early phases of coagulation. The material does not clot fibrinogen in the manner of unmodified thrombin. In the presence of high concentrations of the degradation product, unmodified thrombin is inhibited. The degradation product which represents 4.5 per cent of the weight of the starting material is nondialyzable, contains glucosamine-polysaccharide and peptide bonds, and is precipitated by alcohol from aqueous solution. A single peak is observed in the analytical ultracentrifuge. On free-boundary electrophoresis a pattern is obtained, which resembles that of the starting material in terms of the general relation of the major peaks to each other, but the rate of migration is considerably reduced in the modified preparation as compared to that of the starting material.

The observations indicate that the activities of thrombin in the earlier phases of coagulation can be separated from its effect on fibrinogen. It is also suggested that modification of the enzyme preparation can result in a material which will inhibit the activity of the starting material.

This investigation was supported by the Atomic

Energy Research Contract AT (30-1) 1275 and Grant #C-937 from the National Cancer Institute.

## CINEMOGRAPHY OF THE FORMED ELEMENTS IN THE MICROCIRCULATION

BY GEORGE P. FULTON and HERBERT J. BERMAN  
*Department of Biology, Boston University,  
Boston, Massachusetts*

The dynamic characteristics of the formed elements of blood have been studied *in vivo* at magnifications as great as 2000 X by means of trans-illumination applied to the thin membranous cheek pouch of the hamster and retrolingual membrane of the frog. The circulation of the formed elements is shown in normal preparations and in pathological conditions. Motion picture records have been edited for presentation of significant findings.

Extravascular components such as vasomotor nerve plexus, vascular smooth muscle, and perivascular tissue mast cells are shown as important factors which may regulate or modify the distribution of the formed elements.

The erythrocytes are shown in blood circulating through arterioles, capillaries and venules, thus providing a comparative indication of rates of flow. Adaptability to deformation is illustrated by the squeezing of individual erythrocytes passing through narrow vascular sphincters or through the endothelium during extravasation and petechial formation. Red cells often strike against portions of vessel walls, especially at "sharp corners" of branching arterioles. Changes in the flow characteristics of erythrocytes are recorded in conditions of anemia, after injection of moccasin snake venom, during adrenalectomy, and at terminus following lethal total body x-irradiation. The mechanics of petechial formation are demonstrated by the popping of red cells, one by one, through the endothelium without evidence of actual openings. The importance of the venous side of the circulation is emphasized by the vulnerable nature of venous junctions with respect to petechial formation and by the comparatively large surface area of the venules. A few hours before death from lethal irradiation or cortisone poisoning, the erythrocytes circulate in aggregates resembling "sludged blood," but the aggregates do not form occluding thrombi and break up readily at narrow capillary junctions.

The appearance and behavior of leukocytes is photographed in normal preparations and under conditions such as infection, malignancy, during anticoagulant therapy, and during infusion with dextran. An increase in adhesiveness of leukocytes to the vessel walls is documented in traumatic states and after intravascular injection of various substances such as heparin, x-ray contrast media, or dextran. The presence of coatings of immobile white cells is shown, especially in venules.

The platelets are photographed within living blood vessels, especially in eddies, stationary or slowly moving plasma, and in circulating blood near the endothelial wall at times when the flow is slow. During spontaneous rotation, the bayonet-like edges and oval surface aspect are apparent in the unagglutinated platelet *in vivo*. The role of platelets in hemostasis is demonstrated by the formation of platelet aggregates at points of injury in blood vessels. Furthermore, the mechanics of platelet thromboembolism are shown by motion pictures of the entire process.

Test procedures for susceptibility to platelet thromboembolism, vascular fragility, and bleeding tendency are demonstrated, and results are presented.

## STUDIES ON THE NATURE OF THE ANTIHEMOPHILIC ACTIVITY OF NORMAL HUMAN PLASMA

BY DOUGLAS M. SURGENOR and BARBARA B. STEELE  
*Department of Biological Chemistry, Harvard  
Medical School*

A protein fraction which contains antihemophilic factor activity has been obtained from fresh platelet-poor human resin plasma by the following procedure. After quantitative removal of prothrombin and the other proteins which interact with barium sulfate, over 80 per cent of the AHF activity was precipitated into a fraction similar to Fraction I. This was then redissolved and treated with a high molecular weight dextran sulfate ( $\text{DSO}_4$ —0.01 to 0.02 g/g protein). The insoluble fibrinogen— $\text{DSO}_4$  complex was removed, leaving a solution which contained only traces of fibrinogen but good AHF activity. On dialysis, the AHF activity precipitated with a euglobulin fraction. The product was dried and remains stable for months at  $-20^\circ$ .

This purified AHF was free of other demonstrable clotting factors; it reduced the clotting time of hemophilic plasma, but not of plasma from a PTC deficient patient. It contained several electrophoretic components, the major component being B-globulin. At  $0^\circ$ , solutions are relatively stable at pH 5.5-7, but are very unstable at alkaline reactions. The activity is destroyed by heating for twenty minutes at  $56^\circ$ .

The behavior of this material in isolated systems confirms the activity toward hemophilic plasma. In the thromboplastin generation test it exhibits good accelerator activity with cephalin. In a thrombin generating system using human platelets or extracted portions thereof, it is active in  $\mu\text{g}$  concentrations. Dextran sulfate, if used in even slight excess, is strongly inhibitory, particularly in the thromboplastin generating system; considerable care must be used in carrying out the separation from Fraction I.

## STUDIES ON COLD PRECIPITABLE FIBRINOGEN (CRYOFIBRINOGEN)

By HELEN I. GLUECK

*College of Medicine, University of Cincinnati and  
The Cincinnati General Hospital, Cincinnati*

The present studies of cold precipitable fibrinogen, "cryofibrinogen," were prompted by finding such a protein in the plasma of a patient with a congenital aneurysm of the iliac artery. There had been several attempts at surgical therapy of the lesion. At first, the aneurysm had been wrapped in cellophane. Steel wire had been threaded into the sack of the aneurysm one and three years before his last hospital admission.

Blood was collected in the usual concentration of citrate, oxalate or heparin, centrifuged and the resulting plasma stored at 4°C. A flocculant precipitate began to appear after four to six hours, increasing in amount as storage continued. On re-warming, the precipitate contained in the plasma dissolved at 37°C. No precipitate appeared if the plasma was maintained at room temperature. Serum stored at 4°C, did not contain the precipitate. The cryofibrinogen separated by centrifuging the plasma at 4°C, was washed twice with cold saline, and redissolved in saline at 37°C. It was insoluble in water at 37°. A fibrin clot formed on addition of thrombin to the solution of cryofibrinogen. The supernatant above this clot was incoagulable. Clots formed from cryofibrinogen were insoluble in 30 per cent urea. On heating the solution of cryofibrinogen at 56° for ten minutes a precipitate formed, which did not clot on the addition of thrombin. The characteristics of the cryofibrinogen resembled that noted by Korst and Kratochvel. (Cryofibrinogen in a case of Lung Neoplasm associated with Thrombophlebitis Migrans." *Blood* 10:945, 1955).

The plasma, serum and cryofibrinogen solution were studied by paper electrophoresis. The factor appeared to migrate with the fibrinogen fraction. It could be prepared as a single component by repeated washing and resuspension. Serum did not contain the factor. The cryofibrinogen was present in all samples tested preoperatively. It varied in amounts from 25 to 55 per cent of the total fibrinogen which preoperatively was quite low (160 mg per cent). Preceding, during, and following surgery the patient received 5 units of blood and 7 grams of fibrinogen. Nevertheless, shock and anuria developed following ligation of the aneurysm. The total fibrinogen rose to 310 mg per cent on the third postoperative day; of this 140 mg precipitated at 4°C. The protein disappeared on the 13th postoperative day and did not reappear after three months of observation.

Dogs were used in attempting to produce the protein experimentally. Preoperatively no cryofibrinogen was noted in one dog. It appeared

three days after wiring of the iliac artery and has persisted for ten months. A "non-wired" dog served as a control. Initially, cryofibrinogen was absent in this dog's plasma. The protein appeared spontaneously (following fourteen venesections) during the tenth week of observation. It has persisted for an additional twenty weeks. The significance of this observation is unknown.

Cryofibrinogen was not found in the plasma of twenty-one normal students.

Nineteen patients with normal pregnancies have been studied. In five, small amounts of the protein have appeared intermittently. Four pregnant patients with clinically diagnosed thrombophlebitis have been observed. Cryofibrinogen was present in considerable amounts in the plasma of all. The quantity of the precipitate and its time of appearance have not always correlated with the activity of the phlebitis. The precipitate disappeared in all four patients on the second to fourth postpartum day. In one patient with hypofibrinogenemia associated with abruptio placenta, the precipitate was present during labor, but disappeared twenty-four hours after delivery.

The protein has been seen in three patients following massive hemorrhage, and in one with myeloid metaplasia.

These observations are of a preliminary nature. The origin of cryofibrinogen, its relation to previously observed "intermediate" fibrinogens, and its clinical significance are still under study.

I wish to thank Dr. Louis Herrmann and James Helmsworth for the opportunity to study this patient and for their help in subsequent experimental surgery.

## RECENT OBSERVATIONS ON THE CLOTING OF PLASMA BY COAGULASE AND ON THE NATURE OF THE COAGULASE REACTING FACTOR (CRF)

By MORRIS TAGER

*Emory University, Georgia*

The demonstration of CRF activity in purified human prothrombin of Seegers, and the preparation of purified CRF essentially lacking in prothrombin activity, has led to studies which have sought to reconcile these apparently conflicting findings. Prothrombin has been altered to determine whether the two activities might be dissociated. It has been found that "autoprothrombin" of Seegers still exhibits CRF activity, while in essence demonstrable prothrombin function is lost. Further, human thrombin, in which presumably prothrombin has been totally converted, still possesses the ability to react with staphylocoagulase and accelerate clotting. The evidence presented suggests that the CRF activity represents a fraction of prothrombin; thus, the

intact prothrombin molecule has both functions, while the purified CRF fraction, and the prothrombin derivatives tested have only CRF activity. Studies have been continued to determine the enzymatic activity of staphylocoagulase. It has been found that purified coagulase changes the suspension stability of egg yolk. Observations carried out with Miss Margaret Drummond have indicated that this is not a lecithinase effect, but is a lipase which splits tributyrin and other similar substrates. The relation of this action to the blood clotting phenomenon is under further study with inhibitors and specific antibodies.

### IMMUNOLOGIC STUDIES ON SERUM LIPOPROTEINS

By RAY K. BROWN and LAWRENCE LEVINE  
*Division of Laboratories and Research, New York State Department of Health, Albany.*

Investigation of the immunologic relationship of the various lipoproteins may aid their quantitation and clarify their metabolic significance. Rabbit antiserum to a low-density lipoprotein of  $-S_{1.063} = 5$  was studied by single and double diffusion in agar and by the precipitin and complement-fixation reactions. It was immunochemically homogeneous after absorption with human serum freed from low-density lipoproteins by ultracentrifugation. All flotation classes of low-density lipoproteins examined cross reacted with the antiserum but the high-density lipoproteins did not. This antigenic similarity implies structural similarity. It would be difficult, if not impossible, to prepare antisera for the estimation of specific classes of low-density lipoproteins.

Similar studies showed that it is difficult to prepare an immunochemically homogeneous antiserum to high-density lipoproteins. Only one of ten antisera gave one line by single and double diffusion in agar against whole serum. The recovery of added high-density lipoprotein cholesterol in the immune precipitate and the lack of reaction with low-density lipoproteins define the specificity of this antiserum. This antibody was more reactive with aged lipoprotein than fresh and provided a means of studying the changes that occur during preparation and storage. Preparative ultracentrifugation at high salt concentrations caused partial dissociation of lipid and protein, a change distinct from aging. The partially reactive protein portion became more reactive after addition of lipid. Sera from patients with xanthomatous biliary cirrhosis contain much lipoprotein reacting with antiserum to high-density lipoproteins although little such lipoprotein is present by physico-chemical studies. Perhaps the protein portion of these lipoproteins is similar to that of normal high-density lipoproteins and the increased lipid content causes altered flotation characteristics. The immunochemical distinctness of these types of

lipoproteins agrees with chemical studies of their protein portions. All low-density lipoproteins examined have similar amino acid compositions and an N-terminal glutamic acid. High-density lipoproteins have a characteristic amino acid composition and an N-terminal aspartic acid.

### LIGHT SCATTERING STUDIES ON THE FIBRINOGEN POLYMERIZATION

By ERWIN SHEPPARD  
*Cornell University, New York*

Early work in our laboratory has demonstrated that heparin and other ionic anticoagulants will increase the electronegativity of the fibrinogen molecule's surface. It was of interest to see if this increase in electrical surface charge was sufficient in magnitude to interfere with the conversion of purified fibrinogen. Light scattering studies were done to follow the polymerization of fibrinogen in the presence of heparin as a function of ionic strength, concentration and pH. It has been demonstrated that heparin can block or retard the rate and degree of fibrinogen conversion *in vitro* due to repulsive forces. However, in the presence of serum, heparin's anticoagulant activity in our experimental system is due to the formation of antithrombin II arising from the interaction of heparin and its cofactor. The properties of the heparin-cofactor complex, and in particular, the effect of heat and ether treatments as gleaned from our studies will be described.

Using heparin as the prototype, a variety of similar polyanionic compounds has been studied. These compounds exhibit anticoagulant properties which *in vitro* are due to electrostatic forces. Evidence will be presented to show that the activation of a heparin-life cofactor can occur and that this is a function of the molecular weight of the polyanion.

### ANTITHROMBIN AND HEPARIN COFACTOR FROM HUMAN PLASMA

By CHARLES E. BRAMBEL  
*University of Notre Dame, Notre Dame, Indiana*

Monkhouse, France and Seegers (*Circulation Research*, 3:397, 1955) have prepared potent antithrombin concentrates from heat defibrinated bovine plasma. In our studies, antithrombin with heparin-cofactor activity was isolated as a concentrate from oxalated human plasma which was partially defibrinogenated, deprothrombinized and ether extracted.

Defibrinogenation was accomplished by the cold precipitation method of Seegers and co-workers (*Arch. Biochem.*, 13:232, 1947). The defibrinogenated plasma was then adsorbed with barium sulphate to remove prothrombin and associated clotting factors. The resulting supernatant plasma

was extracted three times with equal volumes of ethyl ether containing 10 per cent ethanol for the purpose of removing antithrombin.

No antithrombin (Schaefer et al: *J. Appl. Physiol.*, 8:300, 1955) or heparin-cofactor activity was found in the residue from ether-ethanol extracts.

On standing for sixteen hours at 32° to 35° F a precipitate forms in the plasma-ethanol-ether mixture. The precipitate was removed by centrifugation. This fraction was rich in antithrombin and heparin-cofactor activity. Subsequent purification of this concentrate resulted in no separation of heparin cofactor from antithrombin activity. The successive stages of isolation were followed with electrophoretic analysis.

Antithrombin and heparin cofactor activity was demonstrated by the prolongation of thrombin times using purified fibrinogen. The activities were checked with the TAME assay (Sherry and Troll: *J. Biol. Chem.*, 208:95, 1954).

When thrombin times were used, a greater effect was noted with the addition of heparin to the concentrate. These data may suggest that additive effects are obtained or that multiple mechanisms are involved. On the other hand, heparin had no effect on the TAME assay, which is a measure of hydrolytic activity. Thus, a dual function for antithrombin suggests itself: (1) the destruction of thrombin; and (2) in the presence of heparin, interference with the thrombin-fibrinogen reaction.

The foregoing data show that heparin with its cofactor (in this case, antithrombin) interferes with the thrombin-fibrinogen reaction but does not alter the esterase activity of thrombin.

Data will be presented to show that this concentrate ("antithrombin-heparin cofactor") also interferes with the conversion of prothrombin to thrombin in human plasma. Inhibition of Agglutinin as a probable mechanism will be presented. These findings indicate a third function for antithrombin.

## REACTIONS OF A BLOOD TRANS—

### $\alpha(1\rightarrow4)$ -Glucosylase

By KENT D. MILLER and WILLIAM H. COPELAND  
*Division of Laboratories and Research, New York State Department of Health, Albany*

A highly purified enzyme preparation was obtained from bovine plasma which specifically attacks terminal  $\alpha(1\rightarrow4)$  linkages between D-glucopyranose residues of the amylosaccharides, maltose, amylose, amylopectin, and glycogen. Glucose is the common end product produced from these substrates. With maltose as substrate oligosaccharide synthesis also occurs. Products of the enzyme-maltose reaction, when quantitatively separated and analyzed, demonstrate one mole of glucose formed from two moles of maltose. One

of the synthetic oligosaccharides isolated was identified as amylotri-ose. Therefore it is indicated that maltose acts as both donor and acceptor substrate and that the enzyme functions by a trans-glucosylation process.

The enzyme does not alter diglucose compounds containing the  $\alpha(1\rightarrow6)$  link (isomaltose), the  $\beta(1\rightarrow4)$  link (cellobiose), the  $\beta(1\rightarrow6)$  link (gentiobiose), and the  $\alpha, \alpha'(1\rightarrow1)$  link (trehalose). Neither does it affect glucose-1-phosphate or the  $\alpha$ - and  $\beta$ -methylglucosides. That terminal linkages of amylopolysaccharides are attacked is indicated not only by the production of glucose as the sole reducing product but also by failure of the enzyme to alter the cyclic Schardinger  $\alpha$ - and  $\beta$ -dextrins.

Properties of the enzyme reactions were studied in order to establish sensitive assay procedures. Both a high molecular weight substrate (amylose) and a low molecular weight substrate (maltose) were employed. Maximum activity on amylose was achieved at pH 7.2, in 1 per cent amylose solution which was 0.05 M with respect to  $\text{Ca}^{++}$ . Under these conditions the initial reaction velocity is directly related to the enzyme concentration. This enzyme-amylose reaction is insensitive to the type of anion or the changes in ionic strength as adjusted with NaCl.

The enzyme-maltose reaction was studied manometrically by superimposing on it the glucose oxidase system, thus measuring the glucose liberated specifically. At pH 6.0 in 0.015 M maltose the initial reaction velocity was directly related to the enzyme concentration. The  $\text{Ca}^{++}$  concentration had no effect on this reaction. Michaelis constant for the maltose reaction is 0.0022 M.

Products of the enzyme-amylose reaction are different when ionic calcium is present and absent. In absence of  $\text{Ca}^{++}$  glucose is the only reducing end product while a homologous series of compounds are split from the polysaccharide with  $\text{Ca}^{++}$  present. Since  $\text{Ca}^{++}$  does not influence the enzyme-maltose reaction, the calcium is considered to reduce the high specificity of the enzyme for terminal  $\alpha(1\rightarrow4)$  glucosidic linkages, allowing it to couple at other sites on the substrate. Such a mechanism for  $\text{Ca}^{++}$  action may prove valuable in understanding the function of this action in many biologic systems.

## STUDIES ON ANTHROMBIN AND HEPARIN-COFACTOR

By FRANK C. MONKHOUSE  
*University of Toronto, Toronto*

The antithrombin potency of defibrinated plasma or serum is the result of two distinct types of action; (a) destruction of thrombin, and (b) interference with the action of thrombin on fibrinogen. In this paper, the term antithrombin

activity will be used to indicate a plasma constituent which destroys thrombin activity. The term heparin-cofactor activity will be used to refer to a plasma constituent which in the presence of heparin prevents thrombin from clotting fibrinogen. With the assumption that a better knowledge of the relationship between antithrombin and heparin-cofactor, and an understanding of the part they play in blood coagulation, can only be obtained by a study of more purified factors, we have attempted to isolate the active materials.

The original antithrombin concentrates prepared by Monkhouse, France and Seegers (*Circulation Research*, 3:397, 1955) were obtained by absorbing the active material on aluminum hydroxide and eluting with phosphate buffer. The eluate was further fractionated by ammonium sulphate. The activity was contained in the fraction soluble at 40 per cent saturation and insoluble at 70 per cent saturation with ammonium sulphate. This fraction contained mainly alpha globulins and albumins. Electrophoretic techniques have been employed in an attempt to determine which protein is most closely associated with activity. Patterns on starch and on paper indicate that both antithrombin and heparin-cofactor activities are found mainly with the alpha globulins or associated lipoproteins. The most active material has been obtained by the use of a vertical curtain electrophoretic apparatus. In terms of activity per mg. of nitrogen, antithrombin has been purified 7.5-fold and heparin-cofactor 130-fold over the concentrates prepared by ammonium sulphate fractionation of phosphate eluates.

Though this represents some progress the question of whether or not antithrombin and heparin-cofactor are distinct plasma proteins remains unanswered. Fractions with antithrombin activity but without demonstrable heparin-cofactor activity have been obtained by the use of the vertical curtain electrophoretic technique. Nevertheless, it would be unwise to conclude from these results that they are separate proteins. Many fractions contain material which inhibits the action of heparin and thus interferes with heparin-cofactor assay. Further, it has not been possible to prepare any fraction exhibiting heparin-cofactor activity which did not also show antithrombin activity.

The exact relationship between activity and lipoprotein content of the fractions has not been determined in this series of experiments. It has been observed, however, that the concentrates of antithrombin and heparin-cofactor consistently have a high lipid content. In one experiment an antithrombin concentrate was adjusted to a specific gravity of 1.063 and then centrifuged for 24 hours at 100,000 g. This resulted in sedimentation of both antithrombin and heparin-cofactor and a similar concentration of their activities. This would indicate that if the active material is associated with lipid it is most likely in the form of a high density lipoprotein.

## IN VITRO, ANIMAL AND CLINICAL STUDIES ON LYOPHILIZED PLATELET MATERIAL

By I. DJERASSI, S. FARBER and E. KLEIN

*From The Children's Cancer Research Foundation and The Tumor Therapy Group of the Division of Laboratories and Research, The Children's Medical Center and the Department of Pathology, Harvard Medical School.*

Lyophilized platelet material has been shown to correct increased vascular fragility and to promote hemostasis in patients with secondary thrombocytopenia due to acute leukemia and aplastic anemia. These effects were not associated with an increase of the peripheral platelet count. This suggested that platelet components could contribute to vascular integrity in the absence of intact platelets.

A number of fractions have been obtained from lyophilized platelet material. The differences in the physical chemical properties of the various fractions have been demonstrated by free-boundary electrophoresis and in the analytical ultracentrifuge. Two of these preparations contained apparently protein-bound carbohydrate. Various activities, such as antithrombin, antiheparin and antihyaluronidase have been related to different fractions.

Lyophilized platelet material and products of its fractionation have been investigated in regard to vascular fragility and hemostasis in thrombocytopenic animals.

Materials with some of the chemical characteristics and biological activities of platelet preparations have been obtained from biological sources other than platelets.

This investigation was supported by the Atomic Energy Research Contract AT (30-1) 1275 and Grant No. C-937 from the National Cancer Institute.

## GENESIS OF PROTHROMBIN ACTIVITY BY CELLULAR CONSTITUENTS

By MARION I. BARNHART

*Wayne State University, Detroit*

Recently there have been two independent reports that mitochondria have the ability to generate prothrombin activity. The present study on genesis of prothrombin activity represents an attempt to define the chemical entity responsible for activity of the mitochondria. Conditions were established for obtaining high yields of prothrombin activity from an "inactive" prothrombin preparation through use of mitochondrial systems. Moreover, it was observed that cathepsin, a group of cellular proteinases, possessed the power of regenerating prothrombin activity. Preparations containing all of the cellular cathepsins as well as preparations more potent in cathepsin B and C were utilized. Cathepsin B, which is largely

localized on mitochondria, appeared to be the most effective proteinase in genesis of prothrombin activity in solutions of pH 7.5 to 8.1, the range for similar activity with mitochondrial preparations. When acid conditions prevailed, mitochondria and cathepsin accelerated destruction of prothrombin activity. Thus, the ability of cathepsin concentrates and mitochondria to inactivate prothrombin or to generate the activity from "inactive" prothrombin depends on the conditions selected. Since parallel results were obtained with mitochondria and with cathepsin in these protein reactions, it is possible that cathepsin of the mitochondrion is the active agent in generation of prothrombin activity from a precursor.

## LIPIDS IN BLOOD CLOTting (READ BY TITLE)

By N. K. SARKAR, G. CHATTERJEE and RENUKA BANERJEE

*Physical Chemistry Department, University of Calcutta and All India Institute of Biochemistry and Experimental Medicine, Calcutta.*

Oxalated rabbit plasma coagulates when Russell's viper (RV) venom and  $\text{Ca}^{++}$  are simultaneously added to it but loses this property after successive treatments with petroleum ether (b.p. 40-60° C). This lipid-free (LF) plasma can be coagulated in the presence of brain or lung thromboplastin, because both of the materials contain a sufficient amount of lipid; thus the addition of either one of these agents is equivalent to the addition of the protein and lipid parts of the active thromboplastin molecule. RV venom is free of lipids and by itself cannot coagulate the LF-plasma.

In studying the nature of the lipid part of the thromboplastin molecule, RV venom was used as the protein portion of the thromboplastin molecule. The lipid part was replaced by purified phospholipids obtained from ox-brain, beef heart, egg yolk, et cetera, in our reconstituted system.

Among the phospholipids studied, cephalin but not lecithin, was found to induce thromboplastic activity in RV venom. Phosphatidic acid (cardiolipin) can to a great extent replace cephalin. Among the fractions of cephalin prepared according to the Folch procedure phosphatidyl ethanolamine and inositol containing phosphatide were most active. Phosphatidyl serine was a poor activator while fractions II and IV were more active than phosphatidyl serine; they were far less active than phosphatidyl ethanolamine.

Chargaff's purified lung thromboplastin, even after heating at 70-75° C for thirty minutes, was found to coagulate the LF-plasma in the presence of RV venom and  $\text{Ca}^{++}$ . Similarly, platelets either heated (100° C for thirty minutes) or unheated can coagulate the LF-plasma under identical con-

ditions. These experiments clearly demonstrate the importance of lipids in blood coagulation.

Experiments with synthetic glycerides showed that only triglycerides can replace cephalin in inducing thromboplastic activity in RV venom. Diglycerides were extremely poor activators and monoglycerides were completely inactive.

## THE PREPARATION AND ACTIVATION OF HUMAN PLASMINOGEN

By J. T. SGOURIS, K. B. MCCALL and J. K. INMAN  
*Division of Laboratories, Michigan Department of Health, Lansing*

We have fractionated seven lots of dried Fraction III by the procedure developed by Kline (*J. Biol. Chem.*, 204:949, 1953) and found that the potency of the final preparations varied from 12.6 to 26.6 proteolytic units (P.U.'s)/mg. N reported by Kline. In order to determine if this was due to the use of aged Fraction III, we prepared a dried Fraction III from relatively fresh, frozen Fraction II+III w paste. Upon subsequent fractionation this material yielded plasminogen with a potency of 35.5 P.U.'s/mg. N. Dried Fraction III-3 was also investigated as a source of plasminogen. It was prepared by Method 9 of Oncley, et al (*J. Am. Chem. Soc.*, 71:541, 1949), with the omission of the final lysis step. This fraction proved to be an excellent starting material for the Kline procedure. In this case, the final product had a potency of 80-90 P.U.'s/mg. N.

Plasminogen prepared by the Kline procedure from dried Fraction III was heated for ten hours at 60° C. at pH 3.5 in order to destroy possible viral contaminants. Losses in activity of less than five per cent were observed.

We have investigated the conversion of plasminogen to the active component of the fibrinolytic system (plasmin) by the following means: (1) spontaneous activation, (2) use of a placental activator, (3) streptokinase activation and (4) urokinase activation. Spontaneous activation by the method of Alkjaersig and Sherry did not occur with all preparations. Plasminogen which had been heated for ten hours at 60° C. did not show any spontaneous activation even in the presence of small amounts of plasmin. We consider the use of streptokinase undesirable because of its pyrogenic and antigenic properties. Human urokinase does not present these disadvantages. In fact, it is feasible to consider the value of a final plasmin product containing an activator. We have prepared a potent, non-pyrogenic urokinase, free of direct proteolytic activity, from human urine by a method involving clarification, isoelectric precipitation and barium sulfate adsorption (129th National Meeting of the American Chemical Society, Dallas, Texas, April, 1956). The activation of plasminogen by urokinase was studied at 0

to  $+2^{\circ}\text{C}$ . in the absence of casein and at pH 7.4. The proteolytic activity resulting from streptokinase activation was used as an index of maximal plasmin activity. This material has a relative potency of 1/17 that of streptokinase. These studies demonstrated the enzymatic nature of urokinase. Urokinase is labile below pH 5.0 with an optimal stability between pH 5.0 and 10.0.

This work was done at the request of the Director of the American National Red Cross Blood Program under an agreement between the American National Red Cross and the Michigan Department of Health Laboratories.

### STUDIES ON THE ACTIVATION OF HUMAN PLASMINOGEN (PROFIBRINOLYSIN)

By NORMA ALKJAERSIG and SOL SHERRY  
*The Jewish Hospital and Washington University, St. Louis.*

Several different types of activation of human plasminogen were investigated.

**Spontaneous activation.** Purified human plasminogen preparations, devoid of significant amounts of antiplasmin, will spontaneously activate to completion, without significant loss of enzyme activity, in the presence of 50 per cent glycerol. The activation appears to be autocatalytic in nature. Temperature, ionic strength, metallic ions, and pH effect the activation rate. Plasmin preparations of high purity and free of activators have been obtained by this procedure.

**Trypsin activation.** Studies of the kinetics of trypsin activation of plasminogen confirm the catalytic nature of the activation. The activation is relatively slow and is non-competitively inhibited by benzoyl arginine methyl ester. These observations suggest that the affinity of trypsin for plasminogen is of a relatively low order.

**Urokinase activation.** Urokinase activates plasminogen rapidly and catalytically. Highly purified urokinase digests casein, and arginine and lysine esters. Since the synthetic substrates competitively inhibit the urokinase activation of plasminogen, the esterase activity appears to be an integral part of the activating function.

**Streptokinase activation.** Recent studies have indicated that the streptokinase activation of plasminogen is a two-step reaction: (1) streptokinase interacts with a plasmin factor to form an activator, and (2) the activator catalytically converts plasminogen to plasmin. The catalytic nature of this activation is apparent only when streptokinase is removed from the system prior to assay. The isolated plasmin has similar properties to spontaneously activated plasmin. The activator formed from streptokinase and the human plasma factor (probably plasminogen itself) appears to be a proteolytic enzyme with lysine and arginine esterase activity. Competitive inhibition of the strepto-

kinase activation of plasminogen by arginine and lysine esters, supports this view.

During the activations studied 25 to 30 per cent of the plasminogen nitrogen becomes TCA soluble. Furthermore in each instance the activation appears to be accomplished by an enzyme capable of digesting casein and the synthetic substrates, suggesting that the conversion from plasminogen to plasmin involves a proteolytic step.

### PHYSICOCHEMICAL STUDIES ON PROFIBRINOLYSIN (PLASMINOGEN) AND FIBRINOLYSIN (PLASMIN)

By SIDNEY SHULMAN, NORMA ALKJAERSIG, and SOL SHERRY

*Department of Bacteriology and Immunology, University of Buffalo School of Medicine, Buffalo, and Jewish Hospital, St. Louis, Missouri.*

A number of preparations of human plasminogen and plasmin have been studied by means of ultracentrifugal and electrophoretic analyses. The plasminogen was prepared from Fraction III by the Kline procedure and was activated either spontaneously or by streptokinase.

Examination in the ultracentrifuge showed the plasminogen to be quite homogeneous, with a sharp main peak and a small, broad, slightly faster component. A plot of sedimentation constant versus concentration (in g./dl.) for the main component in 17 runs, using three different preparations, gave a line with the equation,  $s_{20,w}=4.28S-0.4c$ . The spontaneously-active plasmin showed a similar sedimentation pattern. A plot for seven runs, using two different preparations, gave the line,  $s_{20,w}=3.56S-0.7c$ . Several plasmin samples showed a very slow peak with a sedimentation rate approximately 1 S. This component was never seen in plasminogen.

The diffusion constant for plasminogen was determined to be  $2.96 \times 10^{-7} \text{ cm}^2 \text{ sec}^{-1}$ . The intrinsic viscosity was also measured, resulting in a value of 0.070 dl./g.

Examination by electrophoresis revealed the plasminogen to consist of a pair of very poorly resolved boundaries, while the spontaneously-active plasmin seemed quite homogeneous. These observations were made in glycine buffer, ionic strength 0.10, pH 2.2. A series of runs at various pH values between 2.2 and 4.2 have been made in order to establish the plot of mobility versus pH and to locate the isoelectric point of plasmin. Difficulties are encountered in the isoelectric region because of the very low solubility of the material but a value of approximately 7 can be tentatively established by extrapolation.

The content of tyrosine, tryptophan, and carbohydrate have also been determined in both plasminogen and plasmin, and were reported and discussed.

## Market Research and Medicine's Future

The Opinion Study of Prepaid Medical Care Coverage in Michigan carried out by the Michigan State Medical Society has been recognized nationally as an outstanding piece of work that contributes materially to the solution of some of the momentous problems facing medicine.

The impact of the research has already been felt, for it is highly unlikely that the MSMS House of Delegates could or would have taken the far-reaching action that it did in its September 1957 session had it not been for the well-documented report of the Study. The story of that Study will assume greater historical significance as time evaluates its effects on prepayment plans.

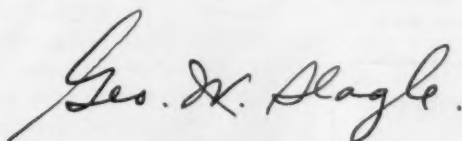
But we believe that the Study had another and perhaps equally important rôle to play in Medicine's future.

Heretofore, medical societies and medical scientists have directed their efforts toward medical scientific finding. The pursuit of the causes and cures for dread diseases has occupied their time, efforts and finances.

Then came the Study. It did not seek the answer to the cause or cure of disease; it sought answers to the ways and means of directly applying the knowledges gained from scientific medical research to the market. It was market research by a profession regarding *professional services* just as surely as business conducts market research regarding *commercial products*. The Study was the first major medical market research effort made by a state medical society.

In years to come, medical market research, carried out by the doctors with the public, will occupy a place of growing importance in the sociology of Medicine. We may call it by a different name than medical market research, but it will be done because this Study has demonstrated the value and need for it.

And it's gratifying to feel that MSMS is leading the way.



President, Michigan State Medical Society

President's



Message

## HIGH POINTS of the 92nd ANNUAL SESSION—MSMS

### *Convention-goers Tax Grand Rapids Facilities*



Past Presidents of MSMS enjoying a luncheon where old times were remembered are (left to right) Louis J. Hirschman, M.D., Traverse City; Henry R. Carstens, M.D., now of Massachusetts; Arch Walls, M.D., Detroit; Burton R. Corbus, M.D., Grand Rapids; L. Fernald Foster, M.D., Detroit; Wilfrid Haughey, M.D., Battle Creek; and E. F. Sladek, M.D., Traverse City.

### **Dateline, Grand Rapids**

These three words appeared on news copy across the nation, as the communication media reported the policy-making and scientific session of the 92nd Annual Session of the Michigan State Medical Society, September 23-28, 1957.

The MSMS Opinion Study of Prepaid Medical Care Coverage in Michigan and the resulting action of the Delegates in proposing sweeping changes in medical care coverage plans made the

biggest news of the week. Special guests from State Medical Societies (Texas, Colorado, et cetera), insurance companies and allied organizations came to witness the tense deliberations.

Due to this influx and other factors, Grand Rapids hotels were bursting at the seams.

But not all was work, for the Officer's Night Dinner Dance provided a welcome relief from the demanding House of Delegates Sessions and the activities of the first day of scientific lectures and exhibits. The evening featured the induction of MSMS President George W. Slagle, M.D., who took over the post from retiring president Arch Walls, M.D., and a message from Michigan's Governor, the Honorable G. Mennen Williams.

G. B. Saltonstall, M.D., of Charlevoix, was elected President-elect by the House of Delegates Tuesday, September 24. Doctor Saltonstall abdicated his post as Councilor to become a Society officer and was succeeded by Donald G. Pike, M.D., of Traverse City.

Registration for the 92nd Annual Session of the Michigan State Medical Society was 3,235.

Doctors of Medicine.....	1,540
Guests .....	422
Exhibitors .....	585

2,547

Woman's Auxiliary members.....	284
Medical Assistants members.....	404

GRAND TOTAL.....	3,235
------------------	-------

## PHOTO ROUND-UP OF SESSION HIGHLIGHTS



Mrs. C. Allen Payne, new president of the Woman's Auxiliary to MSMS, from Grand Rapids (*second from left*), chats a moment about the national scene with Mrs. Paul C. Craig, AMA Auxiliary president (*seated, right*), Mrs. A. C. Stander, retiring Michigan president, and Mrs. W. G. Mackersie (*left*), Michigan delegate to the AMA Auxiliary.

Doctor of the Year, Paul Van Riper, M.D., of Champion in Marquette County, 82 years young, looks on as Kenneth H. Johnson, M.D., speaker of the House of Delegates (*center*), and J. J. Lightbody, M.D., vice-speaker, review the action of the Delegates in naming Michigan's Foremost Family Physician of 1957.



New president of the Michigan State Medical Assistants Society, Miss Marlouise Redman, (*left*), poses for an official portrait with retiring president, Miss Doris Jarrad, following induction ceremonies at the Hotel Manger Rowe in Grand Rapids.

## OFFICERS NIGHT

Retiring MSMS president Arch Walls, M.D., presents the badge of office to incoming president George W. Slagle, M.D., of Battle Creek, during formal ceremonies at Wednesday evening's Officers Night Dinner Dance in the Pantlind Hotel Ballroom.



The Honorable G. Mennen Williams, Governor of Michigan, addressing the 250 guests at the Officers Night Dinner Dance, said that he would protect the personal relationship between the doctor and the patient, and would consult the medical profession on all state public health measures.

# DINNER DANCE



Informality and fun were bywords at the Dinner Dance where guests dined by candlelight and enjoyed soft music before the brief formal ceremonies began.



# Editorial

## THE DOCTOR AS A CITIZEN

The doctor of today owes more to his community than good medical care. The community takes for granted that the doctor's skill in medical matters will be of the highest calibre and it also expects him to be a good citizen.

No executive, business or professional man should expect a free ride in the city or town where he makes his living. Either that community is a good place in which to live and work or it is disappointing and the citizen is not satisfied with his lot.

In either case, he has an obligation to do more than pay taxes and contribute generously to charity and to campaigns. The good community is inevitably one in which responsible citizens have given freely of their time and talents to community projects of all kinds. The doctor, because of his training and personal contacts with people, has the background to make especially worthwhile contributions to many community enterprises.

True, the busy doctor may find it difficult to allot much time to committee and board meetings, but this difficulty is accepted by lay members whose schedule may be less demanding. These lay members are usually understanding and co-operative. Efforts in this direction are one of the best stimulants of good public relations for medicine, whether the community is large or small. They tend to re-establish the doctor in his rightful position as a community leader and counteract the often heard criticism of self interest and plush economy.

Community service not only pays big dividends in making a better city or town in which to practice, but it also improves public attitudes toward medicine. These dividends are a welcome bonus, but the doctor as a good citizen is really repaying a debt he owes to his community.

OLIVER B. MCGILlicuddy, M.D.

## EVIDENCES OF THE DOCTOR AS A CITIZEN

For a number of years, most numbers of *THE JOURNAL* of the Michigan State Medical Society have been assigned to some specific activity or interest of the medical profession. Over a year ago, when the designation of activities for the

various numbers for the year 1957 were made, this November number was assigned to commemorate and to illustrate the doctor as a citizen. Oliver B. McGillicuddy, M.D., of Lansing, was appointed to help work up the program. Several of the original articles included in this number were secured as a result of his activities, and the editorial signed by him was written early in the year. Michigan Medical Service and also Michigan Hospital Service, to a lesser extent, are manifest and outstanding evidences of the doctors working as citizens. The Michigan State Medical Society, in 1939 and 1940, developed Michigan Medical Service after more than ten years of intensive study.

The foremost intention was to make possible medical care to persons of lower income and especially to take care of catastrophic illnesses. This objective was accomplished by a complete new concept of services to our patients, prepayment medicine and the establishment of the theory of budgeting for health services. Incidentally, the profession helped build the budgeting theory of our people generally. The outstanding success is demonstrated by the formation of similar plans throughout the nation, the demonstration that health services can be assured, and the fact that in the seventeen years of operation, we have paid more than a quarter of a billion dollars for services to our subscribers.

Progress of time has shown the need to review and expand the services offered. The medical profession recognized this need, called a special session of our House of Delegates on April 27, 1957, and authorized a complete review and re-evaluation. The reports are being published in this number of *THE JOURNAL*. This is another demonstration of the activities of the physician as a citizen. Again, the Michigan State Medical Society has seen and seized its opportunity for an outstanding public service, and it is fitting that these reports should come in the number of *THE JOURNAL* which a year previously had been designated to emphasize that particular phase of medicine—the doctor as a citizen.

We wish to thank Dr. McGillicuddy for his efforts in accumulating and preparing the material for this issue of *THE JOURNAL*.

## LIBERALIZATION

When Michigan Medical Service was established, it was to care for surgery in the hospital specifically. That was extended to other services in the hospital. There were good and specific reasons for that limitation, but many of our members during the years have protested that limiting our services to hospitalized patients increased the usage and took up hospital beds which could be used for more serious cases instead of being used for minor operations. Effective October 1, 1957, Michigan Medical Service has issued a liberalization rider authorizing the payment of surgery wherever done. It is hoped this will relieve our crowded hospitals, and it is confidently expected that the Blue Cross program will benefit materially. Several years ago, a specific number of procedures—twenty-two in number—were authorized to be done in the office instead of requiring hospitalization. The experience in that time has been a very much increased utilization resulting in the request this year for an advancement of our rates. This extension to all surgery is on a trial basis and will determine the utilization and financial import.

## MEDICAL EDUCATION

Several years ago, it was estimated that our medical schools needed at least \$10,000,000 each year, in addition to the funds now available through regular sources and curriculum fees, in order to continue their very worthy work. Contributions have been solicited quite generally from practicing physicians for a number of years, and these have amounted to impressive figures. However, a very small percentage of our doctors are joining in this work.

The end of another year is now approaching, and our members are urged to remember that any gifts made for medical education purposes are deductible from income tax. Several programs have been suggested; one is that each alumnus make a donation every year of a reasonable sum to his alma mater. This can be done either directly to the school or through the American Medical Education Foundation. Many of our doctors have been following through with this program. The Deans of our two medical schools in Michigan reported last year the reception of generous donations which they have mostly assigned to keep certain types of research work active. One of

our Councillors suggested last year that each man on his birthday make a donation for this purpose. This birthday program has been activated in Detroit in the construction of Wayne State University's Community Art Center, and numerous foundations including "Detroit's Birthday Capital Gifts Committee" contributing.

The Michigan State Medical Society could also have a Birthday Capital Gifts Committee to aid in our medical education program. And please do not forget the Michigan Foundation for Medical and Health Education which is making funds available for Michigan medical students to continue their study. The address is: 606 Townsend Street, Lansing 15, Michigan.

## THE MARKET OPINION SURVEY

The House of Delegates, at its April 27, 1957, special session, authorized a market opinion survey to be conducted and finished before the meeting of the House on September 23. Our members will remember that, following the request of Michigan Hospital Service two years ago for an increase in rates, the Governor appointed a special Study Commission to determine "the reason for constant increase, what must be done, and how better health service could be given the people at less expense." After numerous meetings, the commission suggested and engaged Dr. S. A. Axelrod of the University of Michigan School of Public Health Economics to conduct a detailed survey which would exemplify in detail that Commission's findings. Dr. Axelrod reported that the survey which must also include the medical program would take at least two years and would cost \$200,000. That survey never was made.

In authorizing the present Opinion Survey, the House of Delegates specified that a plan of action be set up which would meet the demands and ideals and previously pledged acceptance by the Michigan State Medical Society, Michigan Medical Service, Michigan State Hospital Association, Michigan Hospital Service, and the Governor's Commission.

The Opinion Study of Prepaid Medical Care Coverage in Michigan was begun in May, 1957, upon the instruction of the April 27, 1957 meeting of the House of Delegates in Detroit.

Responsibility for the Study was placed in the Executive Committee of The Council. Hugh W. Breneman was appointed Director of Study, and

Warren F. Tryloff was named Associate Director. Special Consultant was David J. Luck, Ph.D., director of the Bureau of Business Research, Michigan State University.

The four-phase Study included results from a 1,000 personal interview-survey, a questionnaire mailed to more than 60,000 Michigan residents, a separate survey of doctor opinion, and a compilation of facts from other surveys on this subject.

Results of the cross-section opinion study involving the views of more than 12,000 persons were reported to the MSMS House of Delegates September 23. The full report totaled 274 pages and included detailed tables of statistics, summaries and highlight sections.

According to Max L. Lichter, M.D., Chairman of the House of Delegates Reference Committee on Medical Service and Prepayment Insurance, the Study was of inestimable value to the committee members in their deliberations as to the scope and future direction of prepaid medical care coverage.

#### REFERENCE COMMITTEE ON MEDICAL SERVICES AND PREPAYMENT INSURANCE

We salute the members of the Reference Committee on Medical Services and Prepayment Insurance for an exhausting and tremendous job well and faithfully done. They are Max L. Lichter, M.D., Chairman; Laurence S. Fallis, M.D., H. C. Hill, M.D., R. L. Novy, M.D., D. G. Pike, M.D., Sidney Scher, M.D., and W. P. Strong, M.D. Several important resolutions were referred to this committee for action, study and advice. For years, it has been the policy for the Michigan State Medical Society House of Delegates to refer all resolutions to reference committees which will meet at stated times and hear pleadings and objections, criticisms, comments, information and any material that will help the committee make a final advisory report to the House, thus avoiding much argument on the floor.

There were two main study committees. (1) The Owen Committee, appointed by the House of Delegates to study the prepayment insurance program, to interview everybody interested including medical men, hospitals, labor, industry, rural and urban people and to determine what they want in the nature of medical service, made such studies, held many meetings, and wrote a

report which was distributed to each member of the House before August 15 for primary study. (2) The Council appointed a committee to make detailed studies and specific recommendations. This committee—the Slagle Committee—after two years' study and research, conferences with administration in Blue Shield and many other interested persons who had made prepayment insurance studies, brought in a report to The Council.

The Council met on Sunday, September 22, transacted its routine business, including the final work on its supplemental report to the House of Delegates, and then considered these two reports. The first (Owen Committee Report) was transmitted automatically as it had already been sent out. The second (the Slagle Committee Report) was approved and also transmitted to the House. The Council was in session all day Sunday until nearly 1:00 a.m., Monday morning. These reports were then presented to the House, Monday forenoon.

A good part of Sunday had also been spent by The Council in studying the condensed report of the Market Opinion Survey which had just been completed. Monday noon a copy was given to each member of the House and also to all Blue Shield, State Society and insurance guests and reporters from innumerable news-gathering interests. The reference committee on medical service and prepayment insurance met at 5:00 p.m. on Monday, worked with a very short time out for dinner until the evening meeting of the House, met again that evening and worked until 1:00 a.m. They met again the next morning, Tuesday, before 8:00 a.m. and worked until the House came into session. Tuesday afternoon, after the meeting of the membership of Michigan Medical Service, they again went into session until about 6:30, recessed for half an hour, came back into session until the evening, suspending operations for about fifteen minutes during the time the House was electing new officers. They returned to the conference room where they stayed until 4:00 a.m., Wednesday morning. By 6:00 a.m. Wednesday, the committee was dictating its report to stenographers. The report was finished and ready to be presented to the House at about 10 a.m. at an unprecedented special meeting of the House of Delegates which had been called for this final report.

This reference committee had held open hearings, welcoming any and every person who wished

## Statement of Principles Governing Physicians and Lawyers

In recognition of the public service obligations common to the medical and legal professions, and in the belief that such action will promote a closer cooperation and assist in maintaining a harmonious and compatible relationship between the two professions, thus serving the public interest, the Michigan State Medical Society and the State Bar of Michigan do hereby adopt a statement which covers:

1. Medical Reports Requested by Attorneys
2. Co-Operation Between Physician and Attorney in Cases Expected to Be Tried and Where Attorney Proposes to Present Physician as a Witness.
3. The Physician as a Witness on the Trial of a Case.
4. Compensation for Services of Physicians
5. Inter-professional Courtesy and Understanding

The complete Statement of Principles is published in this issue of THE JOURNAL.

## Resolution

WHEREAS, there has developed a multiplicity of medical meetings in these times, most of them of excellent caliber and value; and

WHEREAS, many of these meetings are sponsored by special organizations, hospitals, and medical schools; and

WHEREAS, for many years, the Michigan State Medical Society is and has been recognized as the representative organization for the doctors of medicine of Michigan; and

WHEREAS, the Michigan State Medical Society has sponsored educational programs for its members each year in March and in September, which have offered excellent clinical material for both specialist and general practitioner; and

WHEREAS, many special organizations, hospitals, and medical schools have been holding meetings of their own during these months, to the detriment of the Michigan State Medical Society-sponsored meetings; therefore, be it

RESOLVED: That The Council of the Michigan State Medical Society believes that the months of March and September, annually, should be left open for the statewide meetings sponsored by the Michigan State Medical Society and that ancillary groups, hospitals, and medical schools be respectfully requested to refrain from scheduling statewide meetings during these months, to the end that all members of the Michigan State Medical Society may be given adequate opportunity to attend the MSMS meetings.

---

Adopted by the Executive Committee of The Council, Michigan State Medical Society October 16, 1957.

# Action of the House of Delegates of MSMS as Adopted on Medical Insurance and Prepayment Insurance

## *Supplemental Report of the MSMS Council on the Report of the Committees on Michigan Medical Service*

### A. GENERAL CONSIDERATIONS

The Michigan State Medical Society has made an intensive study of the development and the operation of the many means currently employed both in Michigan and elsewhere to insure against or to prepay the costs of medical care. The conclusions resulting from that study are set forth below and are based upon the following fundamental considerations.

1. The people of Michigan are entitled to and should have health care which meets the highest standards attainable.
2. Means should be generally available in Michigan which will permit the financing of the costs of necessary medical services and supplies to the greatest extent possible and practicable through prepayment.
3. To whatever extent the cost of a particular medical service is not covered by prepayment, such uncovered amount shall be predictable, be known to the patient in advance, and be within his ability to budget for out of income.

The foregoing can be accomplished only if those responsible for rendering the necessary medical services, namely the physicians of Michigan, assume the further responsibility of establishing within the profession a structure around which sound insurance or prepayment plans can be built and also a system by which the profession can assure itself, the prepayment plan subscribers, and the underwriters that the structure is functioning in accordance with its commitments.

### B. COMMITMENTS BY THE MICHIGAN STATE MEDICAL SOCIETY

In light of the foregoing, the Michigan State Medical Society undertakes the following commitments:

1. The Michigan State Medical Society will endorse any contracts offered by an insurance carrier or prepayment plan organization which embodies certain published principles, provided the carrier issuing the contract stipulates it will not offer any prepaid medical care contract which is preferential or discriminating in its rating. This endorsement shall remain in effect as long as the carrier continues to make such contracts available and keep the stipulation in effect.
2. It being the objective of the medical profession to make certain that voluntary health protection be available to all self-sustaining people at reasonable cost, the endorsement of the Michigan State Medical Society will be given only if rates charged by the insurance or prepayment carrier are fair and equitable and non-discriminatory.
3. The Society will use its best efforts to secure the participation of its members in all contracts endorsed by the Society.
4. A subscriber rendered care by a participating physician will receive "service benefits" as provided in his contract. The basis is set forth in Section D.

5. The Council of the Michigan State Medical Society will appoint a Medical Care Insurance Committee having the following functions:

- (a) To examine all contracts submitted for endorsement. A report will be sent to the Council which will have the authority to issue a certificate of endorsement on behalf of the Society.
- (b) To cooperate with the Permanent Advisory Committee on Fees of the House of Delegates concerning the Relative Value Scale and applicable unit values.
- (c) To develop review procedures for any matters concerning the subscriber, the physician, the insurance carrier, and others.
- (d) To develop Review Committees in each of the Councilor Districts of the Society, nominated locally which shall be ap-

pointed by The Council of the Michigan State Medical Society. These shall function under the direction of the Medical Care Insurance Committee, which will also serve as a unit to which appeal can be made from decisions of the Review Committee(s).

#### C. PRINCIPLES TO BE EMBODIED IN INSURANCE CONTRACTS

- 1. There must be complete freedom of choice of physicians by the patient. Nothing in any contract will imply any restriction of this principle.
- 2. All benefits will be on a service basis consistent with the principles set forth in Section D, except when a subscriber voluntarily occupies a private room in a hospital. Section D published elsewhere.

---

This Statement of Principles is much shortened, condensed principles only being presented here. The complete report is published elsewhere in this issue of THE JOURNAL.

to speak, either to protest or support, had heard everyone to the extent that he wished to talk, and had urged the audience to take part. At one time, they even went through the whole audience asking each individual whether he had any remarks to make. During the hours from 2:00 until 4:00 a.m., on Wednesday morning, the committee was in executive session determining their action.

So thoroughly was this committee's work done and so exhaustive was the study that the Owen report was adopted by a tremendous majority with only one suggestion changed, a study committee being recommended to survey that problem. The revised Slagle report, which was the detailed and explicit statement of program, was adopted without a single negative vote.

The Michigan State Medical Society, through its House of Delegates and by unanimous vote, has now stated its principles and programs to give prepaid medical care to the people of the State of Michigan. We again take off our hats to the members of these committees who accomplished a task as great as any ever presented to our Society and did it in a masterful method to the complete satisfaction of every member of the House, as represented by the vote.

### DON'T CAMOUFLAGE HEALTH CARE

The term "medical care" is very misleading. It has caused much unfavorable publicity and needless harassment to the medical profession. The latest quarterly index of consumer prices is a sample. Month after month, "medical care" has the highest price index of all essential items and services, being 137.9, compared to the total consumer index of 120.2. These total indexes have been increasing each month. An analysis of this report shows that when hospitalization expenses and prepayment premiums are removed from the listing, the rest of the medical care is almost exactly the same as that for miscellaneous goods and services.

The August 10, 1957, issue of the *Saturday Evening Post* contained an article, "Don't Let Medical Bills Bankrupt You." In red type is the following paragraph:

"Each year millions of families are hit by unexpected, ruinous expenses of major illness. Here is one way to avoid this financial catastrophe."

There is a very understanding article based upon a survey conducted by the Health Informa-

tion Foundation which outlines a few catastrophic cases where the medical services and the hospital services were long—prolonged even up to almost ten years in one case. In several of those reports, the author listed hospital services that ran into thousands of dollars and stated that "medical services costs were not obtained"—individual items quoted were almost exclusively hospital costs rather than medical costs. It has become quite popular to refer to everything that is unusually expensive as "medical costs," when actually the majority of those expenses—or a great proportion of them at least—are hospital charges extending over long periods of time and amounting to impressive sums.

The viciousness of this propaganda is evidenced by a series of letters which appeared in the *Saturday Evening Post* for September 7, every one of which referred to this article in the August 10 issue and immediately advocated socialized medicine, with the government taking over the whole costs. All failed to appreciate the fact that there is a difference between medical costs and hospital costs. Unfortunately, everybody has used the words "medical costs" to cover all health services.

Let us adopt the term "health costs."

### EDITOR'S NOTE

We call your attention to the fact that this is the biggest issue of *THE JOURNAL* that the Michigan State Medical Society has ever published, and possibly one of the most significant.

There are 168 numbered pages including a thirty-two-page, tinted section devoted to an analysis of our Market Opinion Survey. Also there is a four-page tinted insert, referring to some most important actions: (1) Statement of Principles between Physicians and Lawyers, (2) Action of the Council regarding conflicting medical meetings detracting from the MSMS Michigan Clinical Institute and Annual Session, (3) Statement of Principles made by the House of Delegates regarding Prepayment Insurance.

There is not an unlimited number of ways for Social Security to expand. Medical care is one of the few areas not covered by "social insurance," and the present framework of the Social Security Act is adequate to cover socialized medicine by means of a few amendments. The Disability Insurance "Trust" Fund could be changed into a Health Insurance "Trust" Fund by the stroke of a pen. Taxes could be increased. A new title could be added to the law and the private practice of medicine could be virtually destroyed.

# Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

## LABORATORY DIAGNOSTIC TESTS FOR ASIAN TYPE INFLUENZA

Health officers of Michigan have received the following directions from the Division of Laboratories of the Michigan Department of Health for submission of specimens for laboratory diagnostic tests for Asian Type Influenza.

It is recognized that laboratory studies on epidemic influenza are not of practical value in the management of individual cases since the majority of patients will have recovered before the studies have been completed. It is important, however, to take a sampling of specimens from a few cases during an outbreak, for laboratory study, in order: (a) to establish specific etiology in each outbreak, (b) preserve viral agents and sera for future study. The number of specimens submitted will depend upon the size of the outbreak and the population at risk. The minimum number will be 4 (4 patients) and the maximum number 12.

Health officers wishing to submit specimens for laboratory detection of Asian Type Influenza should first contact Dr. W. W. Ferguson, Division of Laboratories, Michigan Department of Health, Lansing, telephone number Ivanhoe 4-1491, for information regarding collection and submission of specimens. The division of laboratories, Michigan Department of Health, was prepared to examine influenza specimens on or after October 10, 1957.

### I. Types of Laboratory Tests Available.

- A. Virus isolation and identification.
- B. Complement fixation test for demonstration of a rise in specific antibody titer.

### II. Types of Specimens to be Collected.

#### A. Throat Washings for Virus Isolation.

1. *When to Collect:* For optimum results the washings should be obtained during the first three days of illness and while the patient is still febrile. After the seventh day of illness throat washings are worthless.
2. *Amount:* 10-15 cc.
3. *Specimen Collection:* The patient should gargle thoroughly (2 to 3 times) with 10 to 15 cc. of distilled water. The gargling is collected into a paper cup, then transferred to a clean sterile sputum container.
4. *Specimen Container:* The Division of Laboratories, Michigan Department of Health, will supply upon request collection kits for throat washings consisting of the following items:

- 4 clean sterile sputum bottles
- 4 protective metal bottle containers
- 4 F22 specimen report forms
- 4 case history forms
- 1 cardboard carton 6" x 5" x 5"

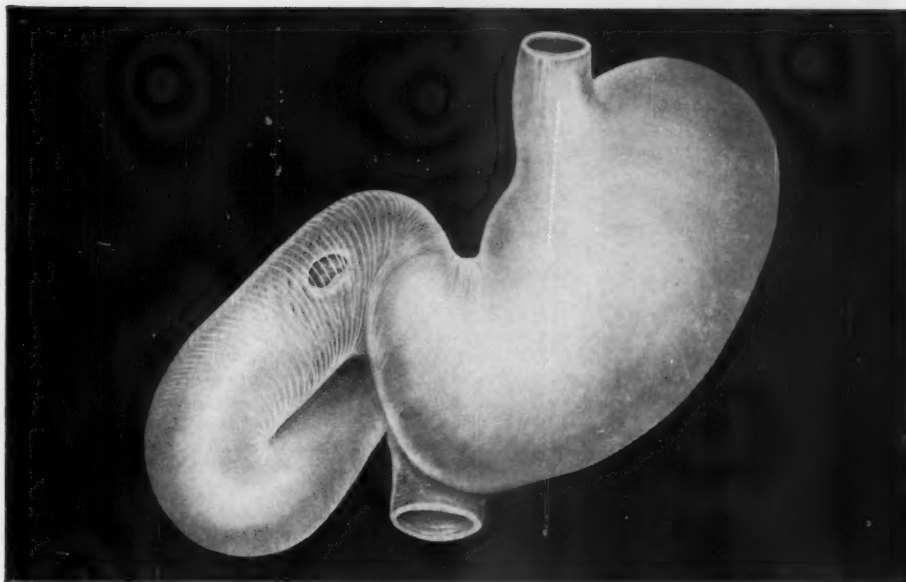
Specimen bottles are supplied 4 to a box for convenience in packing for return to the laboratory.

5. *Delivery of Specimens to Laboratory:* Throat washings may be held 2-3 hours after collection at refrigerator temperatures before final packaging for delivery. After that time they are of questionable value unless packed in dry-ice. Pack the metal bottle containers, 4 to a box, in the cardboard carton, surround containers with dry-ice, then seal the carton with tape. *Please screw top on fecal containers firmly to prevent access of CO<sub>2</sub>. Call your nearest State Police Post and request State Police Relay Service for prompt delivery service to the Laboratories, Michigan Department of Health, Lansing.*

#### B. Blood for Serologic Tests.

1. *When to Collect:* The first blood specimen should be taken *not later* than the fifth day of illness, the second specimen *not before* ten days after onset. Paired specimens are required; single specimens are useless and will not be examined. This is not meant to imply that both specimens need to be sent in at the same time; the opposite is true. Send each specimen from an individual to the laboratory promptly. If for any reason a second specimen cannot be obtained, the Laboratory will appreciate being informed.
2. *Amount:* 10 cc. of clotted blood at each bleeding. Distribute into two shell vials.
3. *Specimen Container:* Upon request the Division of Laboratories, Michigan Department of Health, will supply sterile shell vials (the type provided for collection of blood for serologic tests for syphilis) and mailing containers. For a single patient the following items will be provided:
  - 4 shell vials
  - 2 sets of double mailing containers
  - 2 F22 specimen report forms
  - 2 F4C Michigan Department of Health mailing labels stamped "Influenza Study"
  - 2 case history forms
4. *Delivery of Specimens to Laboratory:* Sent by mail.

- III. *History:* A history must be provided for each patient from whom specimens are collected and this history should accompany specimens forwarded to the Laboratory. Specimens will not be examined unless they are accompanied by completed history forms.



Pro-Banthine® "proved almost invariably effective in the relief of ulcer pain,

*in depressing gastric secretory volume and in inhibiting gastrointestinal motility."*\*

"Our findings were documented by an intensive and personal observation of these patients over a 2-year period in private practice, and in two large hospital clinics with close supervision and satisfactory follow-up studies."\*

Among the many clinical indications for Pro-Banthine (brand of propantheline bromide), peptic ulcer is primary. During treatment, Pro-Banthine has been shown repeatedly to be a most valuable agent when used in conjunction with diet, antacids and essential psychotherapy.

Therapeutic utility and effectiveness

of Pro-Banthine in the treatment of peptic ulcer are repeatedly referred to in the recent medical literature.

*Pro-Banthine Dosage*

The average adult oral dosage of Pro-Banthine is one tablet (15 mg.) with meals and two tablets at bedtime.

G. D. Searle & Co., Chicago 80, Illinois.  
Research in the Service of Medicine.

\*Lichstein, J.; Morehouse, M. G., and Osmon, K. L.: Pro-Banthine in the Treatment of Peptic Ulcer. A Clinical Evaluation with Gastric Secretory, Motility and Gastroscopic Studies. Report of 60 Cases, Am. J. M. Sc. 232:156 (Aug.) 1956.

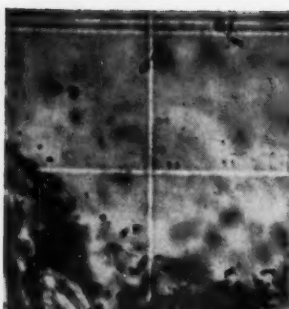
SEARLE

NEW

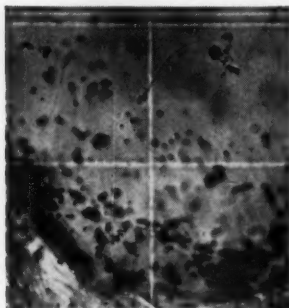
# Immolin®

CREAM-JEL matrix

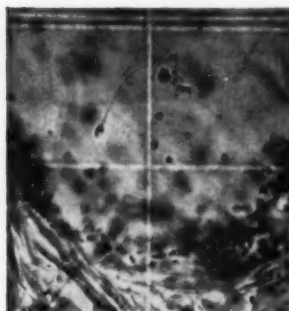
"freezes," weakens and kills even the most viable sperm



**1. TRAPPED** — This highly motile, viable sperm becomes non-reproductive the instant it contacts IMMOLIN Cream-Jel.



**2. WEAKENED** — Devitalized, and no longer motile, the sperm swerves from line of travel and is pulled aside by spreading matrix.



**3. KILLED** — Motion, whiplash stop as sperm succumbs to matrix.

The unique sperm-trapping matrix formed with explosive speed when semen meets IMMOLIN® Vaginal Cream-Jel accounts for the outstanding effectiveness of this *new* contraceptive for use without diaphragm.

These unusual pictures, taken at high speed and magnification, show the IMMOLIN matrix in action — how a single sperm "freezes," weakens and dies — *within the distance it normally travels in one-quarter of a second.*

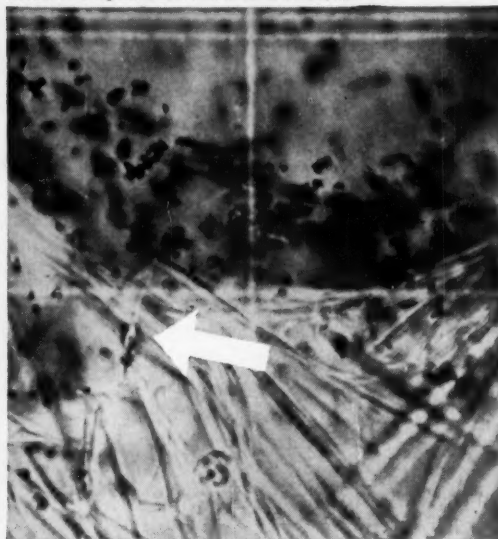
**DEPENDABLE WITHOUT DIAPHRAGM**—With this new contraceptive technique, a pregnancy rate of 2.01 per 100 woman-years of exposure is reported.\* "This extremely low pregnancy rate indicates that IMMOLIN Cream-Jel used without an occlusive device is an efficient and dependable contraceptive."

\*Goldstein, L. Z.: *Obst. & Gynec.* 10:133 (Aug.) 1957.

**JULIUS SCHMID, INC.**

423 West 55th Street, New York 19, N. Y.

IMMOLIN is a registered trade-mark of Julius Schmid, Inc.



**4. BURIED** — The dead sperm is trapped deep in the impenetrable IMMOLIN matrix.

If  
Monilial  
overgrowth  
is a factor

# ACHROSTATIN<sup>\*</sup> V

Tetracycline (phosphate-buffered) and Nystatin

Combines ACHROMYCIN V with NYSTATIN

ACHROSTATIN V combines ACHROMYCIN<sup>†</sup> V... the new rapid-acting oral form of ACHROMYCIN<sup>†</sup> Tetracycline... noted for its outstanding effectiveness against more than 50 different infections... and NYSTATIN... the antifungal specific. ACHROSTATIN V provides particularly effective therapy for those patients who are prone to monilial overgrowth during a protracted course of antibiotic treatment.

supplied:

ACHROSTATIN V CAPSULES contain 250 mg. tetracycline HCl equivalent (phosphate-buffered) and 250,000 units Nystatin.

dosage:

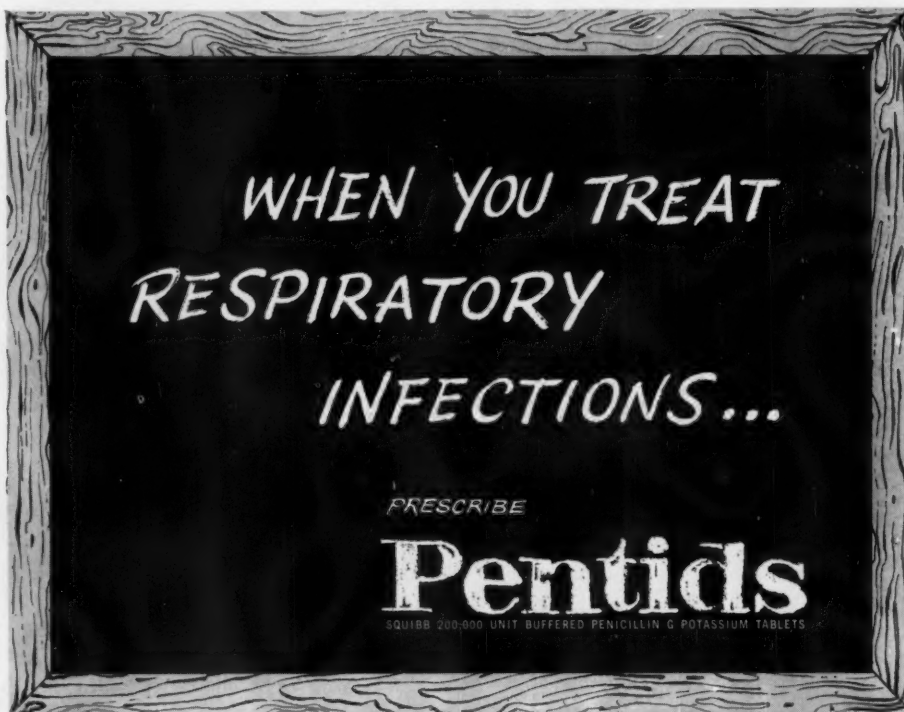
Basic oral dosage (6-7 mg. per lb. body weight per day) in the average adult is 4 capsules of ACHROSTATIN V per day, equivalent to 1 Gm. of ACHROMYCIN V.

<sup>\*</sup>Trademark

<sup>†</sup>Reg. U. S. Pat. Off.



LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, N. Y.



- six years of experience with *Pentids* in millions of patients confirm clinical effectiveness and safety
- excellent results with 1 or 2 tablets t.i.d. for many common bacterial infections
- may be given without regard to meals
- economical . . . *Pentids* cost less than other penicillin salts

**Just 1 or 2 tablets t.i.d.** Bottles of 12, 100 and 500

**NEW! PENTIDS FOR SYRUP.** Orange flavored powder which, when prepared with water, provides 60 cc. of syrup with a potency of 200,000 units of penicillin G potassium per 5 cc. teaspoonful.

*Also available:* *Pentids* Capsules, *Pentids* Soluble Tablets, *Pentid-Sulfas*.

**SQUIBB**



*Squibb Quality—the Priceless Ingredient*

\*PENTIDS® IS A SQUIBB TRADEMARK

unique  
derivative of  
Rauwolfia  
canescens

# Harmonyl\*

combines the full effectiveness of the rauwolfias  
with a new degree of freedom from side effects

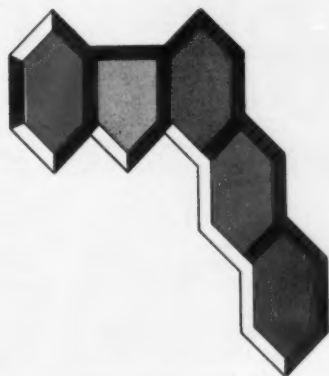
Harmonyl makes rauwolfia more useful in your everyday practice. Two years of clinical evaluation have shown this new alkaloid exhibits significantly fewer and milder side effects than reserpine. Yet, Harmonyl compares to the most potent forms of rauwolfia in effectiveness.

*Most significant: Harmonyl causes less mental and physical depression—and far less of the lethargy seen with many rauwolfia preparations.*

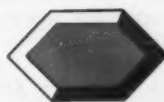
Patients became more lucid and alert, for example, in a study<sup>1</sup> of chronically ill, agitated senile cases treated with Harmonyl. And these patients were completely free from side effects—although a group on reserpine developed such symptoms as anorexia, headache, bizarre dreams, shakes, nausea.

Harmonyl has also demonstrated its potency and relative freedom from side effects in hypertension. In a study comparing various forms of rauwolfia<sup>2</sup>, the investigators reported deserpidine “an affective agent in reducing the blood pressure of the hypertensive patient both in the mild to moderate, as well as the severe form of hypertension.” They also noted that side reactions were “less annoying and somewhat less frequent” with this new alkaloid. Other studies confirm that few cases of giddiness, vertigo or sense of detached existence or disturbed sleep are seen with Harmonyl.

Professional literature on this unique rauwolfia derivative is available upon request. Harmonyl is supplied in 0.1-mg., 0.25-mg. and 1-mg. tablets. *Abbott*



**References:** 1. Communication to Abbott Laboratories, 1956. 2. Moyer, J. H. et al: Deserpidine for the Treatment of Hypertension. Southern Medical J., 50:499, April, 1957.



\* Trademark for Deserpidine, Abbott

## In Memoriam

---

**WILLIAM DeKLEINE, M.D.**, seventy-nine, former State Health Commissioner from 1944 to 1947, died September 20, 1957, at his home in Cheektowage, New York. Dr. DeKleine was a native of Ottawa County, Michigan. A 1906 graduate of the University of Michigan Medical School, he was a pioneer in the field of public work. Dr. DeKleine was the first public health officer in Flint and from there, in 1920, he went to a similar office in Saginaw. He later organized public health offices in other cities including Mansfield, Ohio; Salem, Oregon, and Fargo, North Dakota.

**JOHN W. EDWARDS, M.D.**, fifty-seven, Detroit physician, died August 24, 1957, at Burton Mercy Hospital following a stroke. Born on February 12, 1900, Dr. Edwards received his early education in his birthplace, Pickens, Mississippi. He later graduated from Alcorn College, Howard University, and the Howard University School of Medicine. Upon completion of his medical training, Dr. Edwards served his internship at Provident Hospital in Baltimore, Maryland. He came to Detroit in 1929 and established his first office on Warren Avenue. A year later, realizing the need for doctors in the rapidly-growing Eight Mile Road community, Dr. Edwards moved his office to that area where he remained until his retirement two years ago.

**WILLIAM L. FOSTER, M.D.**, sixty-five, Detroit general practitioner, died September 13, 1957. A native of St. Johns, Michigan, he was graduated from the College of Medicine at Northwestern University in 1926 and was a staff member at Grace, Brent and Mt. Carmel Mercy Hospitals. Dr. Foster was a member of Lansing Lodge No. 33, F&AM and the Bushnell Congregational Church.

**LEO J. GOULET, M.D.**, sixty-four, Ludington physician, died September 9, 1957. Dr. Goulet was born in Toledo, Ohio. His family moved to Bay City where he graduated from Bay City High School. Receiving his Bachelor of Science degree in 1918 from University of Michigan and his medical degree in 1920 from the University of Michigan School of Medicine, he moved to Ludington in 1922 after completing his internship at Foote Memorial Hospital in Jackson. Dr. Goulet was a member of the American College of Surgeons, Ludington Elks and Eagles lodges, Ludington Chapter, Society for the Preservation & Encouragement of Barber Shop Singing in America, and had been a local surgeon for many years with the Chesapeake & Ohio Railroad Company. Dr. Goulet served as physician for high school athletic teams and was an avid hunter, fisherman and boating enthusiast.

**CLYDE A. LEONARD, M.D.**, seventy-five, Jackson County physician, died September 4, 1957. Dr. Leonard attended grade school at Athens, Michigan, graduated

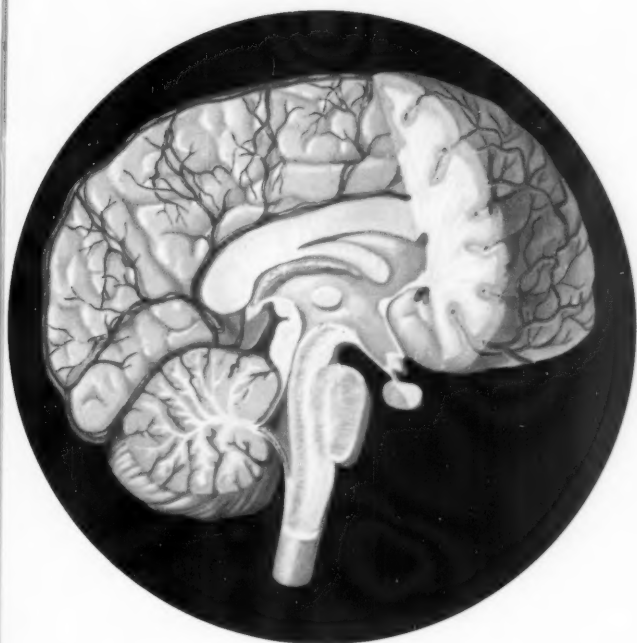
from the University of Michigan Medical School in 1904 and was a past president of the Jackson Medical Society. He served on the staffs of Foote and Mercy Hospitals.

**WESLEY H. MAST, M.D.**, sixty-five, Tecumseh physician, died September 3, 1957. Dr. Mast received his doctor's degree from the University of Michigan in 1924 and interned at Highland Park Hospital before beginning his medical practice in Petoskey in 1925. In 1947, he retired and moved to Tecumseh. He was a member of the Masonic Lodge in Tecumseh and an elder in the Presbyterian Church of Tecumseh. Dr. Mast was a past president of the Northern Michigan Medical Society, past president of the Kiwanis Club, member of the V.F.W. Post 2051 and a veteran of World War I; he served in France.

**FERRIS N. SMITH, M.D.**, seventy-two, Grand Rapids, nationally known plastic surgeon, died September 18, 1957. A 1910 graduate of the University of Michigan Medical School, Dr. Smith began his practice in Grand Rapids in 1913 and during World War I served with the Royal Medical Corps of England as one of two plastic surgeons at Queens Hospital, London. He later taught at the International Clinic in Paris and demonstrated at the Royal College of Surgeons in England. His textbook on plastic surgery was used in all army hospitals at the start of World War II. He had been on the staff of Blodgett Memorial hospital in Grand Rapids since 1923, where he served as Chief of Staff in 1929 and 1930.

**HENRY C. WELLARD, M.D.**, fifty-six, New Baltimore physician, died unexpectedly of a heart attack August 30, 1957. Dr. Wellard was born November 14, 1901 in Ash, Kent County, England, coming to this country and area at the age of five. A Wayne University graduate in the school of medicine, Dr. Wellard joined the Michigan National Guard in 1936 and returned after five and one-half years of service in World War II, a Lt. Colonel. He was a past president of the Macomb County Medical Society; Secretary of the Medical Staff of St. Joseph Hospital; a member of Mt. Clemens Lodge No. 6, F & AM; Mt. Clemens Chapter No. 69 R.A.M.; Association of Military Surgeons of the United States; Port Huron Elks, and Lempke-Blackwell V.F.W. Post 7573.

**WILLIAM C. WYLIE, M.D.**, eighty-nine, Dexter physician, passed away September 11, 1957. Dr. Wylie graduated from Michigan College of Medicine and Surgery in Detroit. Besides serving his community faithfully as a physician, he served many years as health officer, many years on the board of education, and held the office of president of the board of directors of the Dexter Savings Bank for twenty years preceding his death.



***For anxiety, tension  
and muscle spasm  
in everyday practice.***

- well suited for prolonged therapy
- well tolerated, relatively nontoxic
- no blood dyscrasias, liver toxicity, Parkinson-like syndrome or nasal stuffiness

**RELAXES BOTH MIND AND MUSCLE  
WITHOUT IMPAIRING MENTAL OR PHYSICAL EFFICIENCY**



## **Miltown**

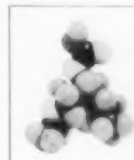
*tranquilizer with muscle-relaxant action*

2-methyl-2-m-propyl-1,3-propanediol  
dicarbamate — U. S. Patent 2,724,720

*Supplied:* 400 mg. scored tablets  
200 mg. sugar-coated tablets

*Usual dosage:* One or two  
400 mg. tablets t.i.d.

*Literature and samples available on request*



THE ORIGINAL MEPROBAMATE
DISCOVERED & INTRODUCED BY
<b>W</b> WALLACE LABORATORIES
NEW BRUNSWICK, NEW JERSEY

## AN IMPORTANT ADVANCE IN MENOPAUSAL THERAPY

**Because** it replaces *half* control with *full* control.  
**Because** it treats the *whole* menopausal syndrome.  
**Because** *one* prescription manages *both* the  
psychic and somatic symptoms.

*Two-dimensional  
treatment  
of  
the*



*menopause*

SUPPLIED: Bottles of 60 tablets.

Each tablet contains:

MILTOWN® (meprobamate, Wallace) ..... 400 mg.  
2-methyl-2-n-propyl-1,3-propanediol dicarbamate.  
U. S. Patent No. 2,724,720.

Conjugated Estrogens (equine) ..... 0.4 mg.  
Licensed under U. S. Patent No. 2,429,398.

DOSAGE: One tablet t.i.d. in 21-day courses with one week rest periods.  
Should be adjusted to individual requirements.  
Samples and literature on request.

# "Milprem"

MILTOWN® + CONJUGATED ESTROGENS (EQUINE)  
A Proven Tranquilizer + A Proven Estrogen

 WALLACE LABORATORIES, New Brunswick, N. J.  
who discovered and introduced Miltown, the original meprobamate.



for a spastic gut \*



\* Spastic conditions of abdominal viscera can be promptly relaxed with Trasentine®-Phenobarbital. It acts both on smooth muscle and parasympathetic nerves; it has a direct anesthetic effect on gastrointestinal mucosa; it calms the patient as a whole. You can prescribe Trasentine-Phenobarbital to alleviate pain and spasm in ulcers, colitis, cholecystitis, pylorospasm, ureteral colic or dysmenorrhea. Tablets (yellow, coated), each containing 50 mg. Trasentine® hydrochloride (adiphenine hydrochloride CIBA) and 20 mg. phenobarbital. **C I B A** Summit, N. J.

It will pay you well  
to check  
and double check



### ✓ Check these facts!

Baker's Modified Milk is a *complete* infant food — contains *all* requirements for complete infant nutrition... It is available in two time-saving forms — easy-to-prepare *Baker's Liquid* and *Baker's Powder*, the latter particularly adaptable for prematures and for complemental and supplemental feedings. Both forms are low in cost — less than a penny per ounce of formula.

#### Feeding Directions

##### BAKER'S MODIFIED MILK (Liquid)

NEWBORN INFANTS (Hospital)—1 part Baker's to 2 parts cool water.

FIRST WEEK AT HOME — 1 part Baker's to 1½ parts cool water.

AFTER FIRST WEEK AT HOME — 1 part Baker's to 1 part cool water.

### ✎ Double Check the results you get!

In the hospital — and at home.



#### BAKER'S MODIFIED MILK THE BAKER LABORATORIES, INC.

*Milk Products Exclusively for the Medical Profession.*

Main Office: Cleveland 3, Ohio • Plant: East Troy, Wisconsin

## CLINICAL COLLOQUY

My patients complain that  
the effect of the pain tablet I prescribe  
often wears off in less than 3 hours.

*Why not try the new analgesic  
that gives faster,  
longer-lasting pain relief?*

You mean something that  
doesn't require repeat dosage so often?

*Yes—it's called Percodan.<sup>®</sup>  
It not only works in 5 to 15 minutes but  
one tablet sustains its pain-relieving effect  
for 6 hours or longer!*

How about side effects?

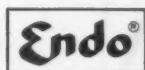
*No problem. For example,  
the incidence of constipation  
is rare with Percodan.\**

Sounds worth trying—what's the average adult dose?

*One tablet every 6 hours. That's all.*

Where can I get literature on Percodan?

*Just ask your Endo detailman or write to:*



**ENDO LABORATORIES**

Richmond Hill 18, New York

\*U.S. Pat. 2,628,185. PERCODAN contains salts of dihydrohydroxycodone and homatropine, plus APC. May be habit-forming. Available through all pharmacies.

# STOP <sup>Michigan</sup> LEG CRAMPS

*You*

DOCTOR:

can prove for yourself — right in your own office — the  
Better Assimilation of Oyster Shell Calcium  
by stopping leg cramps when other calciums have failed.

*Here's WHY Oyster Shell Calcium is \*Better Assimilated:*

1. Richest known source of Calcium—40% pure elemental Calcium.
2. Contains all natural trace minerals.
3. Phosphorus-free.

\*Bio-chemical research proves twice the percental increase in blood Calcium.

FREE—10 BOTTLES (100's) OS-CAL tablets—30-day clinical supply for  
10 patients—on personal request of physician (by Dec. 31, 1957)

## Oyster Shell Calcium Products:

### OS-CAL

Oyster Shell Calcium  
Natural Trace Minerals  
Vitamin D

DOSAGE: 1 tab. t.i.d.

### OS-VIM

Oyster Shell Calcium  
B-Complex  
Vitamins A-D-C-E  
Natural Trace Minerals  
Ferrous Sulfate

DOSAGE: 1 tab. t.i.d.

### OS-feo-CAL

Therapeutic Iron  
Oyster Shell Calcium  
Vitamin D  
Natural Trace Minerals

DOSAGE: 1 tab. t.i.d.

### OS-feo-VIM

Therapeutic Iron  
Oyster Shell Calcium  
Vitamins A-D-C-B6 and K  
Natural Trace Minerals

DOSAGE: 1 tab. daily.

note low dosages!

# MARION

LABORATORIES, Inc.

2910 Grand Ave. • Kansas City, Missouri

\*HARDY, J. A.: *Obstet. & Gynec.* (Nov., 1956)



*just two tablets  
at bedtime*

*for gratifying  
rauwolfia response  
virtually free from side actions*

**Rauwiloid®**





## NEWS MEDICAL

### MICHIGAN AUTHORS

John W. Smillie, M.D., Dale F. Roth, M.D., Fred Blum, M.D., and Keith L. Gates, M.D., Ann Arbor, are the authors of an article entitled "Glaucoma Detection in a General Hospital: A Survey of 1,054 Nearly Consecutive Admissions of Patients Over the Age of Forty Years," published in the *American Journal of Ophthalmology*, July, 1957.

James Barron, M.D., F.A.C.S., Detroit, is the author of an article entitled "Tube Feeding with Natural Foods," read at a meeting of the Great Lakes Regional Division and the Indiana State Chapter, United States Section, International College of Surgeons, French Lick, Indiana, April 7-10, 1957, and published in the *Journal of the International College of Surgeons*, September, 1957.

J. Chandler Smith, M.D., Saginaw, is the author of an article entitled "Treatment of Carcinoma of the Uterine Cervix," published in *Journal of the International College of Surgeons*, September, 1957.

William A. Lange, M.D., F.A.C.S., F.I.C.S., Detroit, is the author of an article entitled "The Hemangioma Problem," read at the Twenty-First Annual Congress of the United States and Canadian Sections, International College of Surgeons, Chicago, September, 1956, and published in the *Journal of the International College of Surgeons*, July, 1957.

Ellis A. Fuller Jr., M.D., and Will W. Ward, Jr., M.D., Ann Arbor, are the authors of an article entitled "Thrombotic Thrombocytopenic Purpura," published in the *Journal of the Kentucky State Medical Association*, May, 1957, and digested in the *Digest of Ophthalmology and Otolaryngology*, April, 1957.

John H. Ganschow, M.D., Detroit, is the author of an article entitled "Eye Conservation Program in Industry," published in *Industrial Medicine and Surgery*, September, 1957.

R. T. Blackhurst, M.D., Midland, is the author of an article entitled "A Plea for Preschool Eye Care," published in *THE JOURNAL of the Michigan State Medical Society* in March, 1957, and reprinted in *Guildcraft*, September, 1957.

Saul Sugar, M.D., Detroit, is the author of an article entitled "Diagnosis of the Commoner Glaucomas," read at the Twenty-First Annual Congress of the United States and Canadian Sections, International College of Surgeons, Chicago, September 9-13, 1956, and published in the *Journal of the International College of Surgeons*, August, 1957.

W. S. Reveno, M.D., Detroit, is the author of a group of abstracted papers presented as part of the

1957 Program of the American Goiter Association, published in *Harper Hospital Bulletin*, July-August, 1957.

Paul E. Ruble, M.D., Solomon G. Meyers, M.D., and L. Byron Ashley, M.D., Detroit, are the authors of an article entitled "Regional Enteritis," published in the *Harper Hospital Bulletin*, July-August, 1957.

Paul J. Connolly, M.D., and William S. Carpenter, M.D., Detroit, are the authors of an article entitled "Hypertension Due to Adrenal Tumor (Pheochromocytoma)," published in the *Harper Hospital Bulletin*, July-August, 1957.

Warren H. Pearce, M.D., Ann Arbor, is the author of an article entitled "Rubella in Pregnancy," published in *THE JOURNAL of the Michigan State Medical Society* and condensed in *Current Medical Digest*, August, 1957.

Vance Fentress, M.D., and David J. Sandweiss, M.D., Detroit, are the authors of an article entitled "Segal's Tubeless Gastric Analysis with Azure A Resin Compound," published in the *Journal of the American Medical Association*, September 7, 1957.

Roderick P. MacDonald, Ph.D., John R. Simpson, M.D., and Egon Nossal, B.S., Detroit, are the authors of an article entitled "Serum Lactic Dehydrogenase—A Diagnostic Aid in Myocardial Infarction," published in the *Journal of the American Medical Association*, September, 1957.

N. A. Goldsmith, M.D., and R. T. Woodburne, Ph.D., Ann Arbor, are the authors of an article entitled "The Surgical Anatomy Pertaining to Liver Resection," published in *Surgery, Gynecology and Obstetrics*, September, 1957.

Harry C. Saltzstein, M.D., and Henry Vandenberg, M.D., Detroit, are the authors of "Abstracts—1957 Meeting of the Society of Head and Neck Surgeons, Boston, and of the James Ewing Society in New York," published in the *Harper Hospital Bulletin*, July-August, 1957.

David S. Johnson, M.D., and Ralph H. Pino, M.D., Detroit, are the authors of an article entitled "Keyhole and Peripheral Iridectomies in Different Eyes in the Same Patient," published in *AMA Archives of Ophthalmology*, September, 1957.

Irving M. Blatt, M.D., and James H. Maxwell, M.D., Ann Arbor, are the authors of an article, "Secretory Sialography," a Symposium: Disorders of the Salivary Glands, presented at the Sixty-First Annual Session of the American Academy of Ophthalmology and Otolaryngology, October 14-19, Chicago, and published in *Transactions of the American Academy of Ophthalmology and Otolaryngology*, July-August, 1957.

(Continued on Page 1476)

*little*  
**How to win friends ...**



The Best Tasting  
Aspirin you can prescribe.

The Flavor Remains Stable  
down to the last tablet.

25¢ Bottle of 48 tablets (1¼ grs. each).

*We will be pleased to send samples on request.*

**THE BAYER COMPANY DIVISION**

of Sterling Drug Inc.

1450 Broadway, New York 18, N. Y.

NOVEMBER, 1957

*Say you saw it in the Journal of the Michigan State Medical Society*

1475

for modern  
control of  
salt retention  
edema

# CUMERTILIN<sup>®</sup>

(Brand of Mercumtilin, Endo)

## Tablets

- effective oral diuretic with no significant gastrointestinal irritation<sup>1</sup>
- Suitable for long-term maintenance therapy.
- eliminates need for injections in certain cases, lengthens interval between injections in others
- basically different in chemical structure, extending the therapeutic choice in organic mercurials

**DOSAGE:** 1 to 3 tablets daily as required

**SUPPLIED:** As orange tablets, in bottles of 100 and 1000. Also available—

**CUMERTILIN** Sodium Injection, 1- and 2-cc. ampuls, in boxes of 12, 25, and 100; and 10-cc. vials, individually and in boxes of 10 and 100.

1. Pollock, B. E., and Pruitt, F. W.: *Am. J. M. Sc.*, 226:172, 1953.

**THE G. A. INGRAM COMPANY**  
4444 Woodward Avenue, Detroit 1, Mich.

(Continued from Page 1474)

The American Medical Writers' Association, at its 1957 annual meeting in St. Louis, September 27, 1957, granted honor awards for distinguished service in medical journalism to four publications, (1) *Post Graduate Medicine*, the official journal of the Interstate Post Graduate Medical Assembly, (2) *The American Journal of Clinical Nutrition*, (3) journal of the Cape Girardeau County Medical Society in Missouri, and (4) *Scope Weekly*, published by the Upjohn Company of Kalamazoo. At this same meeting, the American Medical Writers Fellowship Awards were given to sixteen persons including Jacques P. Gray, B.A., M.D., M.P.H., Detroit, and Benjamin Baxter Wells, B.S., M.D., Ph.D., Detroit.

\* \* \*

Oscar A. Brines, M.D., Chairman of the Department of Pathology, College of Medicine, Wayne State University, has become the first American to be elected President of the International Society of Clinical Pathology at the recent meeting of the Society in Brussels, Belgium. The International Society of Clinical Pathology is held once every three years. Twenty-three countries were represented at the conference.

\* \* \*

Robert Horton, M.D., Professor of Epidemiology of the University of Michigan School of Public Health, is director of the school's "Tecumseh project." \$30,000.00 of the \$318,000.00 legislative grant of 1957 and 1958 for research in human resources has been made available. Obtaining the large amount of information desired in this study will cost considerably more than the amount made available through this grant; however, other sources are helping.

Tecumseh, a city of 6,500, was designated as the community for the health study and has received the approval of almost all the residents. The procedure will be to obtain information in such areas as diabetes, cardio-vascular disease and nutrition and possibly other conditions. There will also be a complete study of the animal population which is being made by veterinarians with emphasis on locating diseases carried by animals which might be transferred to man. Very much information has already been accumulated during the year through health, agricultural, social and economic agencies, enough to form a very good picture of general characteristics of the population and its environment. Other community health surveys have been made but this one is expected to be more extensive and more all encompassing. It is hoped to find and establish patterns of disease among the population and their relationship to type of employment, size of family, and other factors; also how and why these patterns are formed. It may take several years to complete the details.

\* \* \*

**Branch County Bulletin.**—The first issue of the new *Bulletin of the Branch County Medical Society* has been received from J. C. Heffelfinger, M.D., Secretary-Treasurer. It is a sixteen-page effort containing adver-

(Continued on Page 1478)

# BRIGHTON HOSPITAL

A non-profit Foundation  
**FOR ALCOHOLISM**

A facility designed to rehabilitate or to aid  
the addict in arresting his addiction.

Walter E. Green, M.D., Superintendent and Medical Director.



Brighton Hospital meets the standards established by the Michigan State Board of Alcoholism and is recommended by that Board.

12851 East Grand River  
(U.S. 16)  
Brighton, Michigan  
Academy 7-1211

when anxiety and tension "erupts" in the G. I. tract...

## IN DUODENAL ULCER



# PATHIBAMATE\*

Meprobamate with PATHILON® Lederle

*Combines Meprobamate (400 mg.) the most widely prescribed tranquilizer . . . helps control the "emotional overlay" of duodenal ulcer — without fear of barbiturate loginess, hangover or habituation . . . with PATHILON (25 mg.) the anticholinergic noted for its extremely low toxicity and high effectiveness in the treatment of many G.I. disorders.*

*Dosage:* 1 tablet t.i.d. at mealtime. 2 tablets at bedtime.

*Supplied:* Bottles of 100, 1,000.



\*Trademark

® Registered Trademark for Tridihexethyl Iodide Lederle

LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK

## Important Announcement of Arteriosclerosis Treatment

GEROT PHARMACEUTIKA, owners of United States Letters Patent #2-776-973 issued January 1957 to Gerhard Gergely of Vienna, Austria, have licensed MEYER AND COMPANY of Detroit, Michigan, to synthesize and market 3, 7-dimethyl-xanthine double salt in the United States of America.

3, 7-dimethyl-xanthine double salt with oleic acid and magnesium, a stable compound marketed in Austria since 1950 under the name "Perskleran" and used in the treatment of ARTERIOSCLEROSIS is being marketed by MEYER AND COMPANY under the trade name of "Athamol."

The product is now available in tablet form.

Literature and clinical samples are available on request.

### MEYER AND COMPANY

*Pharmaceutical Manufacturers*

16361 Mack Ave.

Detroit 24, Michigan

(Continued from Page 1476)

tising, of course, and a notice of the next meeting. It contains very interesting secretary jottings, an anonymous editorial, and notifies practically every member that he will be expected to contribute to the *Bulletin*, with some suggestions. One page is devoted to disease statistics. We shall watch with interest.

\* \* \*

**New Medical Journal.**—The American Rheumatism Association has announced the publication of a new medical Journal, *Arthritis and Rheumatism*, the official journal of the American Rheumatism Association. Grune and Stratton, Inc., of New York, will add this to several other journals which they are publishing. The new journal will appear bimonthly starting with the January-February issue in 1958.

\* \* \*

**The Third Postgraduate Seminar in Physical Medicine and Rehabilitation**, which is sponsored by the Bay County Medical Society, Mercy Hospital and General Hospital with their Committee on Physical Medicine, and Detroit Memorial Hospital and Sinai Hospital in Detroit, Michigan, was held in Bay City on October 9, 1957. There was an afternoon and evening session with visits to the Departments of Physical Medicine and Rehabilitation of Mercy Hospital and General Hospital following the afternoon session.

\* \* \*

**The Wayne State University Board of Governors**, at its monthly meeting in September, approved gifts totalling \$1,291,300. The largest single gift was \$500,000 from the National Institute of Health, an agency of the United States Public Health Service which must be matched with funds from the University and will be used for construction of a Basic-Science Research Center. Facilities for research in the basic health aid sciences will be expanded and the training program for predoctoral and postdoctoral students in the health and medical fields will be enlarged. Another grant of \$225,994 went to the Medical Research and Training Program; included in this was a grant from the Michigan Heart Association of \$44,677 to be used in continuing eight research programs. The Rands Family Foundation gave \$10,000 to continue research fellowships in the field of geriatrics. The estate of the late Richard Cohn, a prominent Detroit advertising and publishing executive, gave a grant of \$425,000 to be used toward the construction of a new College of Nursing and Graduate School Building which will bear Mr. Cohn's name. The new College of Nursing Building will make possible an increased enrollment in the nursing curriculum which is now limited to about 600 students.

\* \* \*

**Lewis Cohen, M.D.**, Detroit, was awarded first prize for his exhibit "Electrovasography-Quantitative Diagnosis for Vascular Disorders," presented at the American Congress of Physical Medicine and Rehabilitation, Los Angeles, California, September 9-13, 1957.

(Continued on Page 1480)

NEW . . . intranasal synergism

R<sub>x</sub>

# Biosynephrine

TRADEMARK

## Nasal Spray

15 cc.



### Contains:

#### DECONGESTIVE

*Neo-Synephrine® HCl 0.5%*

#### ANTI-INFLAMMATORY

*Hydrocortisone 0.02%*

#### ANTI-ALLERGIC

*Thenfadin® HCl 0.05%*

#### ANTIBACTERIAL

*Neomycin (as sulfate)  
0.6 mg./cc.*

*Polymyxin B  
(as sulfate)  
3000 u/cc.*

*Convenient plastic,  
unbreakable squeeze bottle.  
Leakproof, delivers  
a fine mist.*



Winthrop

LABORATORIES  
NEW YORK 18, N. Y.

Neo-Synephrine (brand of  
phenylephrine) and Thenfadin  
(brand of thenyldiamine),  
trademarks reg. U.S. Pat. Off.

**POTENTIATED ACTION for  
better clinical results**

in

**COLDS  
SINUSITIS  
ALLERGIC RHINITIS**

*New!***BAND-AID**

TRADE MARK

**Plastic Strips**

- ELASTIC PLASTIC
- FLESH COLORED
- STAYS CLEAN
- THIN, SMOOTH PLASTIC
- GREASE RESISTANT
- WON'T WASH OFF

100's 1" x 3"  
100's 3/4" x 3"

### *Conveniently Located in Grand Rapids*

- Hospital Equipment
- Pharmaceuticals
- Office Equipment
- Physicians' Supplies
- Trusses
- Surgical Garments
- Physiotherapy Equipment

**Medical Arts Supply Company**

233 Washington S. E.

Phone GL 9-8274

Grand Rapids 2. Mich.

**Medical Arts Pharmacy**

20-24 Sheldon S.E.

Phone GL 9-8274

Grand Rapids 2. Mich.

*(Continued from Page 1478)*

**H.R. 9467.**—On August 27, 1957, Congressman Forand introduced Bill H.R. 9467 as an amendment to the Social Security Act and the Internal Revenue Code: "To increase the benefits payable under Federal Old Age Survivors and Disability Insurance Program; to provide insurance against the costs of hospital, nursing home and surgical service for persons eligible for Old Age and Survivors Insurance benefits." This is a much more extensive amendment than those of Senator Murray or those of Congressman Dingell, and it has met the opposition of the American Medical Association which has appointed a new committee. The new AMA Task Group Chairman is G. M. Fister, M.D., of Ogden, Utah, a trustee of the AMA. The other members are Francis C. Coleman, M.D., Des Moines; Robert L. Novy, M.D., Detroit; J. Duffy Hancock, M.D., Louisville; and George F. Gsell, M.D., Wichita. The objective of this committee is to spearhead a major drive against this piece of legislation which is a mammoth step in the direction of socialized medicine. This may trigger the AMA into resurveying its position on two other topics which are before the same House Ways and Means Committee. These are Social Security coverage of M.D.'s, who are the only occupational group outside the fold and a proposed pension plan of tax benefits for doctors and other professional persons, the Jenkins-Keogh Bill H.R. 9 and 10.

\* \* \*

The American Board of Obstetrics and Gynecology will hold its Part I Examinations in various parts of the United States and Canada, on Thursday, January 2, 1958, at 2:00 p.m.

Candidates notified of their eligibility to participate in Part I must submit their case abstracts within thirty days of notification of eligibility. No candidate may take the Written Examination unless the case abstracts have been received in the office of the Secretary.

Current Bulletins outlining present requirements may be obtained by writing to the office of the Secretary: Robert L. Faulkner, M.D., American Board of Obstetrics and Gynecology, 2105 Adelbert Road, Cleveland 6, Ohio.

\* \* \*

**Michigan Medical Service Audit Cards.**—Beginning July 1, 1957, Michigan Medical Service has been sending out audit cards to each subscriber who has benefited by medical service which was paid for by the Blue Shield. In July, 52,510 cards were mailed out and 14,698 were returned. Of these, 14,036 reported everything satisfactory. Of the 662 not satisfactory replies, sixty-four referred to Blue Cross. The most frequent item was surgical benefits not adequate (162). Eighty-four reported that the doctor charged in addition to Blue Shield benefits, thirty-seven reported the x-ray benefit in the basic contract was not adequate, thirty-four asked for more maternity benefits, and thirty complained that the doctor's charges were too high. There were 251 miscellaneous complaints out of well over 14,000 replies and it is assumed that any of the 52,510 having

*(Continued on Page 1482)*

among nonhormonal antiarthritics...

unexcelled in  
therapeutic potency

## **BUTAZOLIDIN<sup>®</sup>**

(phenylbutazone GEIGY)

In the nonhormonal treatment of arthritis  
and allied disorders no agent surpasses  
BUTAZOLIDIN in potency of action.

Its well-established advantages  
include remarkably prompt action,  
broad scope of usefulness,  
and no tendency to development  
of drug tolerance. Being  
nonhormonal, BUTAZOLIDIN  
causes no upset of normal  
endocrine balance.

BUTAZOLIDIN relieves pain,  
improves function,  
resolves inflammation in:  
Gouty Arthritis  
Rheumatoid Arthritis  
Rheumatoid Spondylitis  
Painful Shoulder Syndrome

BUTAZOLIDIN being a potent therapeutic  
agent, physicians unfamiliar with its  
use are urged to send for detailed  
literature before instituting therapy.

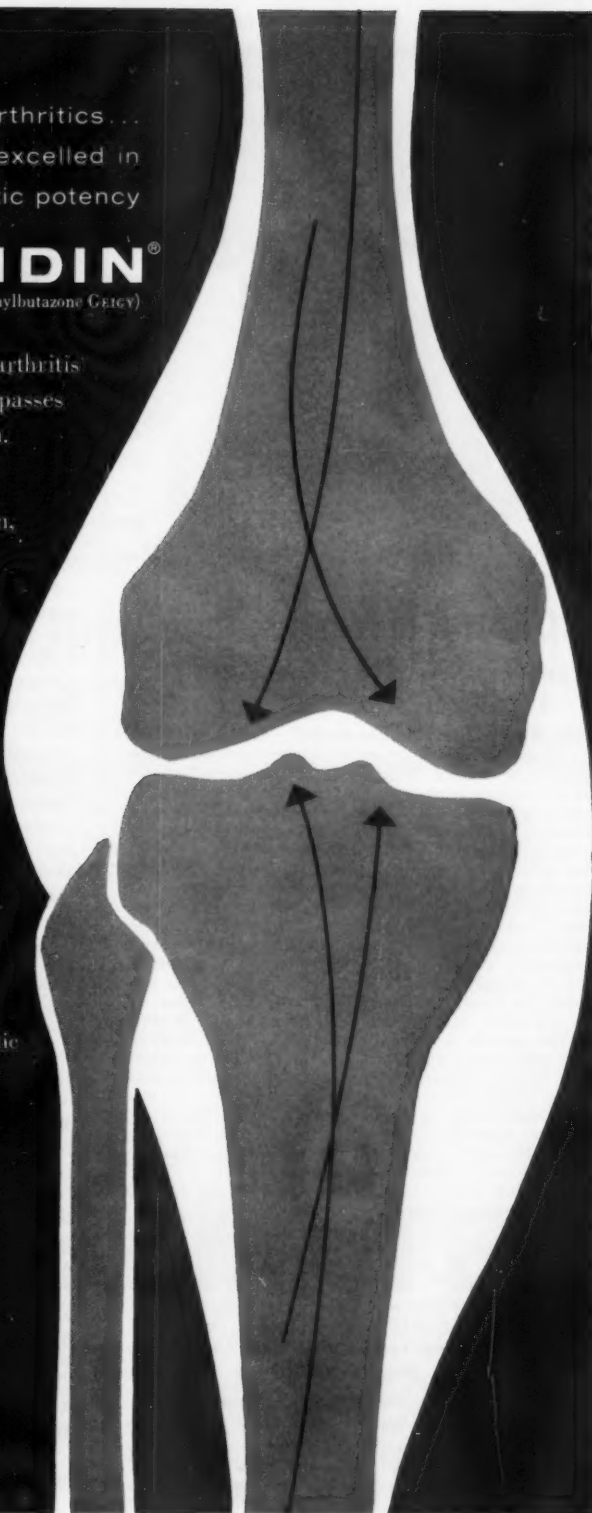
BUTAZOLIDIN<sup>®</sup> (phenylbutazone  
GEIGY). Red coated tablets of 100 mg.

### **GEIGY**

Ardley, New York



77057





Size  $10\frac{3}{8}" \times 10\frac{3}{8}" \times 11"$   
Weight 28 pounds

## CAMBRIDGE

### "Simpli-Scribe" DIRECT WRITING ELECTROCARDIOGRAPH

**T**HE Cambridge "Simple-Scribe" Model Electrocardiograph has important design features not found in any other Direct Writing Electrocardiograph. Its platen is concave to compensate for the arc described by the writing stylus. As a result, its records are true rectilinearly without tangential error and accordingly do not require correction for accurate interpretation.

The entire writing mechanism of the Simpli-Scribe is rugged, and yet it is extremely light in weight. This means a minimum of inertia and friction, low power requirement and resultant higher accuracy. The entire instrument is designed for light weight and convenience. For example, replacement of the paper roll is just a matter of snapping it into position. Simple means are provided for checking not only the standardization of stylus deflection, but also for checking accuracy of timing of the records as well. The controls are minimum in number and conveniently grouped for ease of operation. The instrument requires no grounding wire under normal operating conditions.

The Simpli-Scribe is a fine instrument worthy of its Cambridge nameplate. It provides the Cardiologist, Clinic or Hospital with a direct writing Electrocardiograph of utmost usefulness and accuracy.

**CAMBRIDGE ALSO MAKES:** The Standard String Galvanometer and Direct Writer Electrocardiographs in Multi-Channel Models, Catheterization Monitor-Recorders, Operating Room Cardioscopes, Educational Cardioscopes, Electrocardiographs, Plethysmographs, Amplifying Stethoscopes, Research pH Meters, Automatic Continuous Blood Pressure Recorders and Instruments for Measuring Radioactivity.

*Send for descriptive literature*

**CAMBRIDGE INSTRUMENT CO., Inc.**  
3732 Grand Central Terminal, New York 17, N. Y.

Cleveland 15, Ohio, 1720 Euclid Avenue  
Detroit 2, Mich., 7410 Woodward Avenue  
Oak Park, Ill., 6605 West North Avenue  
Philadelphia 4, Pa., 135 South 36th Street  
Silver Spring, Md., 933 Gist Avenue

*Pioneer Manufacturers of the Electrocardiograph*

## CAMBRIDGE

### ELECTROCARDIOGRAPHS

(Continued from Page 1450)

criticisms would have replied. In general, that makes a very satisfactory report. This study will be continued.

\* \* \*

**Wayne State University**, because of a recent increase in Blue Cross-Blue Shield medical insurance rates, will pay nearly \$4,000 more each year for the 1,360 faculty and staff members holding hospital and medical policies.

The University's Board of Governors Sept. 18 approved a hike in the annual subsidy on the policies from \$23.04 to \$25.08 for each policy holder, effective October 1.

Cost to the University for the rest of this fiscal year will be about \$2,400. The increase in premiums will be absorbed by the University and won't affect the rates paid by individual policy holders.

The State Insurance Commission recently approved the increase in rates on a basis of higher costs for hospital and medical services.

The American Society of Anesthesiologists held its annual convention in Los Angeles, California, October 14-18, 1957. Two Michigan groups were on the program. A paper entitled "An Evaluation of The Cardiovascular-Respiratory and General Pharmacologic Properties of 21 Hydroxy, 3-20 Dione-Sodium Succinate (Hydroxydione) in Humans" was presented by F. A. Montmorency, M.D., A. Chen, M.D., H. Rudel, M.D., W. W. Glas, M.D., and L. E. Lee, Jr., M.D., from the Departments of Surgery and Anesthesiology, Wayne County General Hospital, Eloise, Michigan. The other paper, "Lumbar Sympathetic Nerve Block for Obstetrical Analgesia, Preliminary Report of Over 1,200 Cases," was presented by Mary Lou Byrd, M.D., Edward Y. Postma, M.D., and Glenn M. Van Dommelen, M.D., from the Department of Anesthesiology, Butterworth Hospital, Grand Rapids, Michigan.

\* \* \*

Attending the House of Delegates meeting of the Michigan State Medical Society in Grand Rapids, September 23, 24, 25, were twenty-seven guests representing Blue Shield, Mutual of Omaha, Lincoln National Health Insurance Association of America, and many others. Besides Detroit, they came from Chicago, Benton Harbor, Fort Wayne, Indiana, Des Moines, Iowa, New York City, Birmingham, Michigan, Ann Arbor, Grand Rapids, St. Louis, Missouri.

State Medical Societies and the AMA were represented: The AMA from Chicago and from Washington, D. C.; the California Medical Association, Indiana State Medical Association, Iowa State Medical Association (two); Kentucky State Medical Association; Minnesota State Medical Association (three); Missouri State Medical Association, Medical Society of the State of North Carolina, Ohio State Medical Association, Ontario Medical Association (two); Texas Medical Association (two), and the State Medical Society of Wisconsin.

Representatives were present from eight press groups, including newspapers. Also present were representatives

(Continued on Page 1484)

It's an "OPEN AND SHUT CASE" for **sandura**



The new WELCH ALLYN instrument case that offers you far greater

- DURABILITY
- CLEANLINESS
- COMPACTNESS
- BEAUTY

The Sandura Case is molded in reinforced material to stand great shock or abrasion, with tarnish-proof soft rubber lining which protects instruments from shock. The entire case can be washed or sterilized with alcohol.

ILLUSTRATED —  
Welch Allyn Ophthalmoscope  
Set No. 983, complete with  
Sandura Case.

## THE MEDICAL SUPPLY CORPORATION OF DETROIT

3502 Woodward Avenue

TEmpLe 1-4588

Detroit 1, Michigan

when anxiety and tension "erupts" in the G. I. tract...

## IN GASTRIC ULCER



# PATHIBAMATE\*

Meprobamate with PATHILON® Lederle

*Combines Meprobamate (400 mg.) the most widely prescribed tranquilizer . . . helps control the "emotional overlay" of gastric ulcer — without fear of barbiturate loginess, hangover or habituation . . . with PATHILON (25 mg.) the anticholinergic noted for its extremely low toxicity and high effectiveness in the treatment of many G.I. disorders.*

*Dosage:* 1 tablet t.i.d. at mealtime. 2 tablets at bedtime.

*Supplied:* Bottles of 100, 1,000.



\*Trademark

® Registered Trademark for Tridihexethyl Iodide Lederle

LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK



## CARBASED

ACETYLCARBOMAL TABLETS

- Proved safe and effective by 6 years' clinical use.
- Soothes the central nervous system, produces calmness without hypnosis.
- Non-toxic, non-cumulative, non-addicting, no known contraindications.
- Does not impair mental or physical function.
- Orally effective within 30 minutes for sustained action up to 6 hours.
- Economical.

*Indications: Tension, nervousness, anxiety and muscular spasm.*

*Supplied: White round tablets  
Acetylcarbomal 5 gr. in bottles  
of 100, 1000.*

Write for samples and literature

There's Always A Leader

**MALLARD, INC.**

3021 WABASH, DETROIT 16, MICHIGAN



(Continued from Page 1482)

from Michigan Hospital Association, Michigan State Pharmaceutical Association, Greater Detroit Hospital Area Council, Student Medical Association in Ann Arbor, Michigan State Nurses Association, Wayne State University College of Medicine, as well as the MSMS legal counsel and the Executive Secretary of Wayne County Medical Society.

\* \* \*



Known active and inactive cases of tuberculosis are on the increase in Michigan. Last June 30, there were 7,474 active tuberculosis cases, according to the central tuberculosis register of the Michigan Department of Health. This was an increase of nearly 3 per cent over the 1955 figure of 7,272. Inactive cases under health department supervision are increasing at an even faster pace. In 1955, there were 12,925 inactive cases. By last June 30, the figure had climbed to 15,909. This is an increase of 23 per cent. Because tuberculosis is a relapsing and a communicable disease, both active and inactive cases need medical and public health attention.

MICHIGAN TUBERCULOSIS ASSOCIATION

\* \* \*

The Department of Continuing Medical Education, Wayne State University College of Medicine, held a Symposium on Current Progress in Allergy on October 16, 1957. Credit hours for postgraduate medical education were given to members of the Academy of General Practice who attended. The Lecturers were A. J. Bollet, M.D., John H. Burger, M.D., Meryl M. Fenton, M.D., Alex Friedlaender, M.D., Julius J. Greenberg, M.D., Benjamin Gutow, M.D., Homer Howes, M.D., Benjamin M. Lewis, M.D., Jack Rom, M.D., and Milton J. Steinhardt, M.D.

\* \* \*

Max Karl Newman, M.D., Detroit, on September 7, 1957, addressed the International Society of Ultrasound in Medicine in Los Angeles, California. The title of his talk was "Observations on the Use of Ultrasound, Ultrasound Combined with Hydrocortisone by Needle Injection, and Ultrasound Combined with Hydrospray Injection, in 225 Cases of Restricted Scapulohumeral-Shoulder Syndrome."

He also addressed the American Association of Electromyography and Electrodiagnosis in Los Angeles, September 8, 1957, on the subject, "Electromyographic Observations in Extra-ocular Muscles Conditions."

Another paper was delivered to the General Practice and Pediatrics Group at Queen's Hospital, Honolulu, Hawaii, entitled "The Newer Developments in Physical Medicine and Rehabilitation."

An address, "Ultrasound in Meti-cortico Steroids in Bone and Joint Disease" was delivered on September 17,

(Continued on Page 1486)

**Functional and Organic Control**

of **PEPTIC ULCER**

Gastro-Intestinal  
Irritability and Tension

**MONODRAL<sup>®</sup>**  
with **MEBARAL<sup>®</sup>**

TABLETS

*Potent* ANTISECRETORY • ANTICHOLINERGIC • SEDATIVE

Each tablet contains:

Monodral bromide	5 mg.
Mebaryl	32 mg.

**PROVIDES**

Dependable control of hyperacidity and hypermotility. Spasmolysis. Prompt and prolonged pain relief. Tranquillity without drowsiness.

**DOSE:**

Peptic ulcer, 1 or 2 tablets three or four times daily. Other gastro-intestinal disorders, 1 tablet three or four times daily.

**SUPPLIED:** Bottles of 100 tablets.

Protective  
Coating  
with

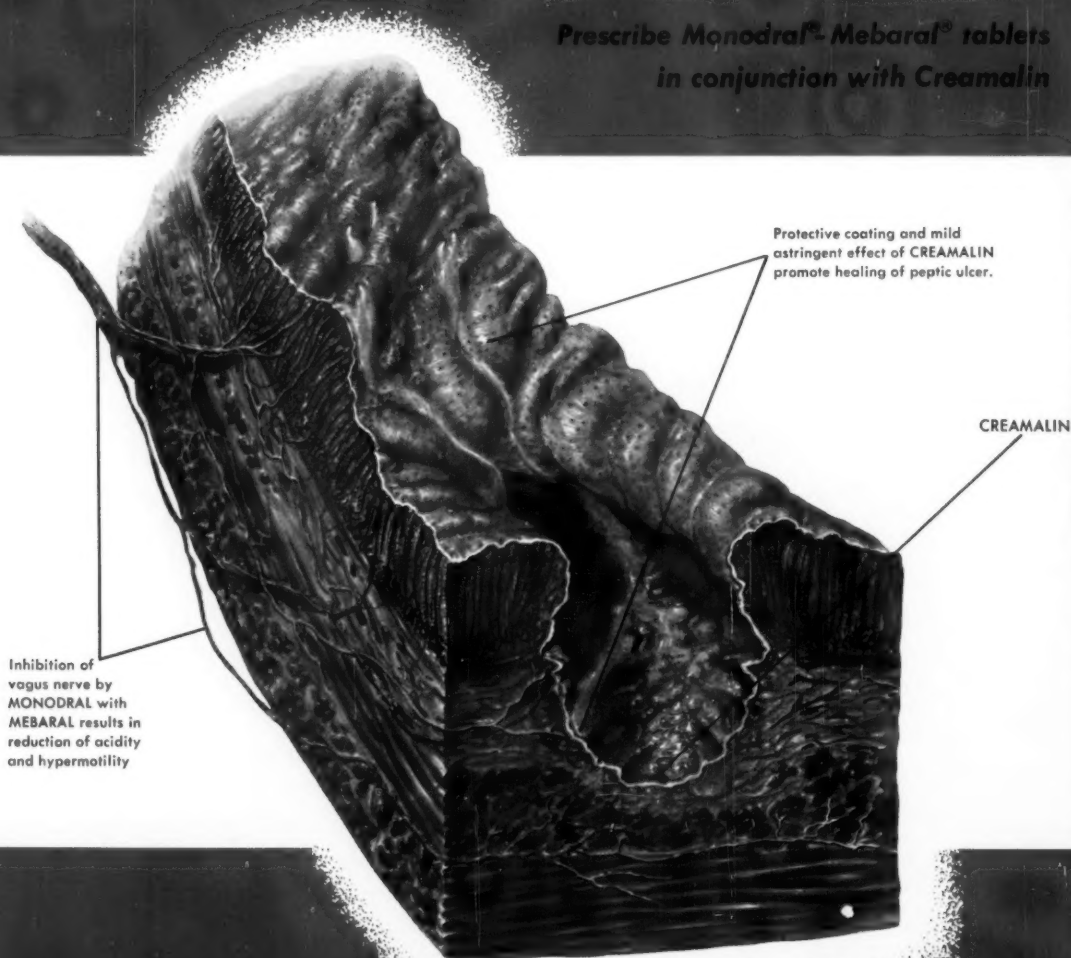
# *Creamalin*<sup>®</sup>

PIONEER ALUMINUM HYDROXIDE GEL

FAST ACTING REACTIVE GEL

For best results in **PEPTIC ULCER**

Prescribe *Monodral*<sup>®</sup>-*Mebaral*<sup>®</sup> tablets  
in conjunction with *Creamalin*



**DOSE:**

From 2 to 4 teaspoonfuls *Creamalin* liquid  
or from 2 to 4 *Creamalin* tablets (well  
chewed) every two to four hours, with a  
small amount of water or milk.

*Creamalin* liquid — 8 and 16 fl. oz.  
*Creamalin* tablets — bottles of 50 and 200.

*Creamalin* (brand of aluminum hydroxide gel), *Monodral* (brand of pentilene) and *Mebaral* (brand of mephobarbital), trademarks reg. U. S. Pat. Off.

*Winthrop* LABORATORIES  
NEW YORK 18, N. Y.

## Current Concepts in

# Feeding Newborns

Successful infant feeding depends on effective planning of the newborn's nutritional regimen. The first feeding, 12 hours after birth, may consist of a prelacteal solution of KARO® Syrup. This should be offered in one or two ounce amounts at two hour intervals for 24 to 48 hours to fulfill the high water requirement during the first week of life. Breast feeding may be initiated on the second day for five minute intervals to obtain colostrum and stimulate breast secretion. However, the prelacteal feeding is continued thereafter and between nursings.

Artificial feeding is offered on the second day if breast feeding is denied. Small infants are fed at three hour intervals and large infants at four hour intervals. The initial formula usually is a low caloric milk mixture to enable gradual adaptation of the feeding to the infant's tolerance. Concentration of the formula is grad-

ually increased at intervals of several days, in the absence of digestive disturbances. The infant should be fed in a semi-reclining position, burped during and after feeding, and kept on his right side or abdomen undisturbed for an hour.

The same problems of infant feeding recur from generation to generation, but solutions may differ with each era. The carbohydrate requirement for all infants is as completely fulfilled by KARO Syrup today as a generation ago. Whatever the type of milk adapted to the individual infant, KARO Syrup may be added confidently because it is a balanced mixture of low molecular weight sugars, readily miscible, well tolerated, palliative, hypoallergenic, resistant to fermentation in the intestine, easily digestible, readily absorbed and non-laxative. It is readily available in all food stores.

### **R** FIRST FORMULAS FOR NEWBORNS ADAPTED ACCORDING TO TOLERANCE

FORMULA I ..... 11 cal./oz. *Whole Milk ..... 8 oz. Water ..... 12 oz. Karo ..... 1/2 oz. 3 1/2 oz. x 6 q 4h.	FORMULA II ..... 13.5 cal./oz. Whole milk ..... 9 oz. Water ..... 11 oz. Karo ..... 3/4 oz. 3 1/2 oz. x 6 q 4h.
FORMULA I ..... 12.5 cal./oz. **Evap. milk ..... 4 oz. Water ..... 14 oz. Karo ..... 1/2 oz. 3 1/2 oz. x 6 q 4h.	FORMULA II ..... 16 cal./oz. Evap. milk ..... 5 oz. Water ..... 13 oz. Karo ..... 3/4 oz. 3 oz. x 6 q 4h.
FORMULA I ..... 11 cal./oz. Dried milk ..... 4 tbsp. Water ..... 20 oz. Karo ..... 1/2 oz. 3 1/2 oz. x 6 q 4h.	FORMULA II ..... 14.5 cal./oz. Dried milk ..... 5 tbsp. Water ..... 20 oz. Karo ..... 3/4 oz. 3 1/2 oz. x 6 q 4h.
FORMULA III ..... 16 cal./oz. Whole milk ..... 10 oz. Water ..... 19 oz. Karo ..... 1 oz. 3 1/2 oz. x 6 q 4h.	
FORMULA III ..... 20 cal./oz. Evap. milk ..... 6 oz. Water ..... 12 oz. Karo ..... 1 oz. 3 oz. x 6 q 4h.	
FORMULA III ..... 18 cal./oz. Dried milk ..... 6 tbsp. Water ..... 20 oz. Karo ..... 1 oz. 3 1/2 oz. x 6 q 4h.	

\*Whole lactic acid milk formulas may also be prepared from whole cow's milk.

\*\*Whole lactic acid milk formulas may also be prepared from evaporated cow's milk.

MEDICAL DIVISION  
CORN PRODUCTS REFINING CO.  
17 Battery Place, New York 4, N. Y.



Produced by  
Corn Products Refining Co.

Adapted from Nelson's Pediatrics,  
Saunders, Phila. 1954

## NEWS MEDICAL

### TO XPEDITE DIAGNOSIS



The cardiogram, as part of your regular examination, gives you a valuable diagnostic record. Your patient is spared the inconvenience of seeing another physician. You are saved the time awaiting his report.

The Burdick EK-2 portable unit combines simplicity of operation with exceptional accuracy. A flick of the switch gives a clear, permanent record. Leads are permanently marked. No chemicals, darkrooms, or processing are needed. You can make an accurate diagnosis in minutes.

The EK-2 is sold through 296 qualified medical supply houses throughout the United States. Over 1,500 Burdick sales representatives are backed by complete service facilities for all your Burdick equipment.



Literature illustrating and describing the EK-2 will be sent you on request.

**THE BURDICK CORPORATION**  
MILTON, WISCONSIN

Branch Offices: CHICAGO • NEW YORK  
Regional Representatives:  
ATLANTA • CLEVELAND • LOS ANGELES

**THE G. A. INGRAM COMPANY**

4444 Woodward Avenue, Detroit 1, Michigan

(Continued from Page 1484)

1957, to the Orthopaedic and Physical Therapists at the Rehabilitation Center of Hawaii, Honolulu, Hawaii.

On September 18, 1957, Dr. Newman presented a paper on "Electromyographic Observations of Muscular Atrophy" before the Neuro-Psychiatric Group, Alexander Young Building, Honolulu, Hawaii.

Dr. Newman was elected to the Board of Governors of the American Academy of Physical Medicine and Rehabilitation at the recent meeting in Los Angeles on September 9, 1957.

\* \* \*

The American Trudeau Society announces a limited number of fellowships to promote the training of clinicians, medical teachers and scientific investigators in the field of tuberculosis and respiratory diseases. Awards are open to citizens of the United States for work within this country. Applications must be received by January 1. Write the Director of Medical Education, ATS, The Henry Phipps Institute, 7th and Lombard Streets, Philadelphia 47, Pennsylvania.

\* \* \*

The American Foundation for Allergic Diseases announces post-doctoral fellowships in Research and Clinical Allergy (for two years each) with stipend of \$4,500 for the first year and \$4,750 for the second year with laboratory and travel expenses for the two-year period, \$750. For application and additional information, write Colin M. MacLeod, M.D., 820 Maloney Clinic, 36th and Spruce Streets, Philadelphia 4, Pennsylvania. Applications must be filed no later than December 15.

\* \* \*

The American Goiter Association offers the Van Meter Prize Award of \$300.00 for the best essays submitted concerning original work on problems related to the thyroid gland. Copies must be submitted no later than February 1, 1958. For complete information, write John C. McClintock, M.D., 149½ Washington Avenue, Albany 10, N. Y.

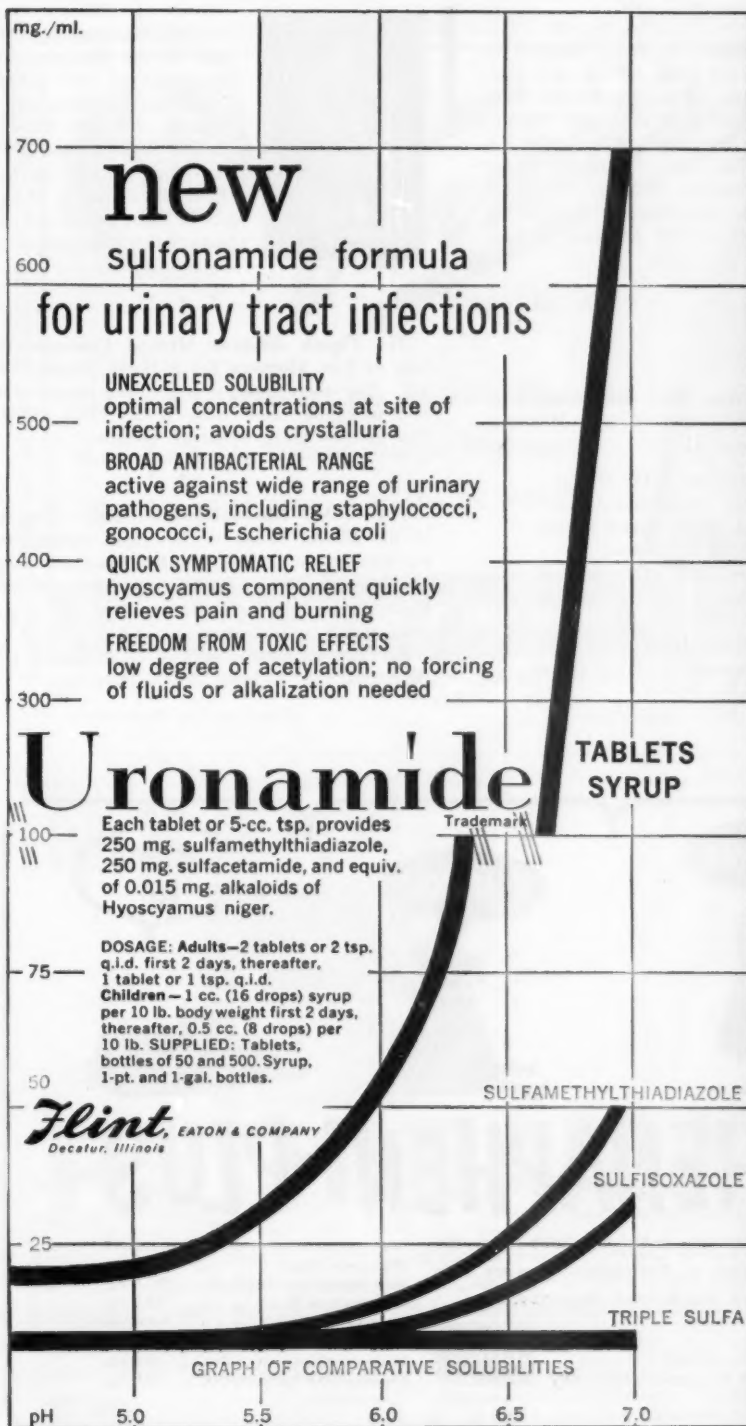
\* \* \*

The American College of Chest Physicians offers three awards to winners of 1958 Prize Essay Contest—\$500.00, \$300.00, \$200.00. The contest is open to undergraduate medical students—essays to be written on any phase of the diagnosis and treatment of chest diseases (heart and/or lungs) and closes April 15, 1958. For application and further information, write ACCP, 112 East Chestnut Street, Chicago 11, Illinois.

\* \* \*

A unique Cancer Retreat was held in northern Michigan the weekend of September 20, under the auspices of the University of Michigan. Held annually for the past four years, this autumn's retreat was highlighted by papers delivered by Van R. Potter, M.D., Madison, Wisc.; Harold F. Dorne, M.D., Bethesda, Md.; Alfred Gellhorn, M.D., Bethesda, Md.; Lauren V. Ackerman, M.D., St. Louis; and a number of Michigan participants. The Cancer Retreat, for UM faculty members and special guests, included transportation to and from Ann Arbor.

(Continued on Page 1488)



"Sulfamethylthiadiazole... effective chemotherapeutic agent in urinary infection... tolerated quite well... bacterial spectrum is comparable to that of sulfadimethine and sulfisoxazole."<sup>1</sup>

"[Sulfacetamide]... among the least toxic but one of the most effective of the sulfonamides against urinary tract pathogens."<sup>2</sup>

1. Hughes, J., et al.; South. M. J. 47: 1982, 1954.  
2. Kerley, L., and Headlee, C. P.; J. Am. Pharm. A. (Scient. Ed.) 48: 82, 1956.

## NEWS MEDICAL

(Continued from Page 1486)

"Clinical conversation pieces" are being recorded on a series of long-play discs and being offered as a post-graduate course in pediatric allergy by Borden Company of New York. The LP discs are titled "Hydration in Relation to Infant Nutrition," "Cows' Milk Allergy in Infants," and "The Allergic History." Some 10,000 copies of these recordings are being distributed to pediatricians and general practitioners. For further information, write Borden's at 350 Madison Avenue, New York 17.



Louis J. Hirschman, M.D., Traverse City, was elected Chairman of the Committee of Past Presidents at the meeting in Grand Rapids, September 26, coincident with the 92nd MSMS Annual Session. Among the Past Presidents at the meeting was Henry R. Carstens, M.D., formerly of Detroit, and now living in Springfield, Massachusetts (83 Longhill Street).

\* \* \*

**Michigan Clinical Institute Past Chairmen.**—The following have served as Chairmen of past Michigan Clinical Institutes:

1947—Grover C. Penberthy, M.D., Detroit  
 1948—H. H. Cummings, M.D., Ann Arbor  
 1949—Wm. A. Hyland, M.D., Grand Rapids  
 1950—P. L. Ledwidge, M.D., Detroit  
 1951—Burton R. Corbus, M.D., Grand Rapids  
 1952—Edward F. Sladek, M.D., Traverse City  
 1953—J. Milton Robb, M.D., Detroit  
 1954—Wilfrid Haughey, M.D., Battle Creek  
 1955—Louis J. Hirschman, M.D., Traverse City  
 1956—L. W. Hull, M.D., Detroit  
 1957—Otto O. Beck, M.D., Birmingham

**The Fourth Bahamas Medical Conference** will be held at Fort Montagu Beach Hotel, Nassau, December 1-5. For reservations, program, and complete information including rates, write B. L. Frank, M.D., 1290 Pine Avenue West, Montreal, Canada.

\* \* \*

**The MSMS Headquarters Building.**—Two members of the MSMS House of Delegates, wishing to speed the building of the new MSMS headquarters planned for Lansing, added personal contributions over and above the amount indicated as earmarked dues by the 1957 House of Delegates.

These contributors were: M. A. Darling, M.D., Detroit, and L. J. Bailey, M.D., Detroit.

(Continued on Page 1490)

**NOSE COLD**

**HEAD COLD**

**ASIATIC FLU**

# PHENAPHEN® PLUS

**Phenaphen Plus is the physician-requested combination of Phenaphen, plus an antihistaminic and a nasal decongestant.**

<p><b>each coated tablet contains:</b> Phenaphen</p> <p>Phenacetin (3 gr.) . . . . . 194.0 mg.</p> <p>Acetylsalicylic Acid (2½ gr.) . . . . . 162.0 mg.</p> <p>Phenobarbital (¼ gr.) . . . . . 16.2 mg.</p> <p>Hyoscyamine Sulfate . . . . . 0.031 mg.</p>	<p style="text-align: center;"><b>plus</b></p> <p>Prophepyridamine Maleate . . . . . 12.5 mg.</p> <p>Phenylephrine Hydrochloride . . . . . 10.0 mg.</p>
--	---

Available on prescription only.

Michigan State Medical Society



# Vernor's

GINGER ALE

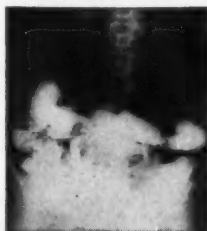
Developed by Michigan's First Registered Pharmacist  
 Recommended by Eminent Michigan Physicians  
 FLAVOR MELLOWED 4 YEARS IN WOOD



**A PREFERRED BEVERAGE FOR HOME AND HOSPITAL**

when anxiety and tension "erupts" in the G. I. tract...

## IN ILEITIS



# PATHIBAMATE\*

Meprobamate with PATHILON® Lederle

*Combines Meprobamate (400 mg.) the most widely prescribed tranquilizer . . . helps control the "emotional overlay" of ileitis — without fear of barbiturate loginess, hangover or habituation . . . with PATHILON (25 mg.) the anticholinergic noted for its extremely low toxicity and high effectiveness in the treatment of many G.I. disorders.*

*Dosage:* 1 tablet t.i.d. at mealtime, 2 tablets at bedtime.

*Supplied:* Bottles of 100, 1,000.



\*Trademark

• Registered Trademark for Tridihexethyl Iodide Lederle

LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK

## NEWS MEDICAL

(Continued from Page 1488)

In general the chronic degenerative diseases, neurological diseases, sensory disorders, mental disease and severe injuries due to accidents make up the major health problems for the nation as a whole. All age groups are represented among those afflicted by these conditions whose one common characteristic is prolonged duration. Care of the "long-term patient" is, in fact, the chief health problem for the physician and the patient's family, for the community, and for the nation as a whole.—L. E. BURNEY, M.D., *California Medicine*, January, 1956.

\* \* \*

Walter F. Carey, Detroit, Chairman of The Association Committee of the Chamber of Commerce of the United States, addressed the American Society of Association Executives in annual session in St. Louis last month. Some of his remarks—aimed at associations in general—are particularly pertinent to professional societies:

"The simple fact of existence, legislatively at least, in these complex days, dictates that groups adversely affected by legislative proposals either mobilize their resources to defend themselves or be overwhelmed. The individual, operating within the constitutional grant of right of petition, finds the right virtually useless unless he employs it in concert with others.

"All business activity in this country is increasingly subject to rules, regulations and statutes which penetrate deeply into the very heart of its operation. A lone voice, however loud and vigorous, raised in the legislative forum, is lost.

"In every sphere of human activity, we have all learned that only the chorus of voices has the decibel count to be heard, and that the right of petition can be exercised effectively only in concert with similar expression by others.

"So . . . as I have said . . . the function of the voluntary organization is to serve as the magnetic screen or the chemical precipitant. It searches out of the immense volume of facts, figures and opinions bearing on its members' interests, those selective items of special interest or critical importance. Over a period of time, it examines the cumulative items it has winnowed, and from these, the astute management of the association determines trends—a task also beyond the capacity of the lone individual unit. Finally, it often must mobilize the resources of those it represents for constructive action or defense."

### MEDICAL TELEVISION SHOWS

Produced by Michigan Health Council

WJBK-TV, DETROIT

- September 1—Traffic Safety—(Film—"The Case of Officer Hallibrand")
- September 8—Mickey's Miracle—(Film—"Mickey's Miracle")
- September 15—Hard Luck Charlie—(Film—"Hard Luck Charlie")
- September 22—M.D. Placement—(Film—"A Citizen Participates")
- September 29—To Save a Life—(Film—"To Save a Life")

(Continued on Page 1492)



## Geritag in PREVENTIVE GERIATRICS a FIRST from TUTAG!

Now — 20 to 1 Androgen-Estrogen  
(activity) ratio\*!

Each Magenta Soft Gelatin Capsule contains:

Methyltestosterone.....	2 mg.	Thiamine Hcl.....	2 mg.
Ethinyl Estradiol.....	0.01 mg.	Riboflavin.....	2 mg.
Ferrous Sulfate.....	50 mg.	Pyridoxine Hcl.....	0.3 mg.
Rutin.....	10 mg.	Niacinamide.....	20 mg.
Ascorbic Acid.....	30 mg.	Manganese.....	1 mg.
B-12.....	1 mcg.	Magnesium.....	5 mg.
Molybdenum.....	0.5 mg.	Iodine.....	0.15 mg.
Cobalt.....	0.1 mg.	Potassium.....	2 mg.
Copper.....	0.2 mg.	Zinc.....	1 mg.
Vitamin A.....	5,000 I.U.	Choline Bitartrate.....	40 mg.
Vitamin D.....	400 I.U.	Methionine.....	20 mg.
Vitamin E.....	1 I.U.	Inositol.....	20 mg.
Cal. Pantothenate.....	3 mg.		

Write for Latest Technical Bulletins.

\*REFERENCE: J.A.M.A. 163: 359, 1957 (February 2)

S. J. TUTAG & COMPANY **TUTAG** DETROIT 34, MICHIGAN

# ANNUAL CLINICAL CONFERENCE

## CHICAGO MEDICAL SOCIETY

MARCH 4, 5, 6 and 7, 1958

Palmer House, Chicago

Daily Half-Hour Lectures by Outstanding Teachers and Speakers on subjects of interest to both general practitioner and specialist

Panels on Timely Topics

Daily Teaching Demonstrations

Medical Color Telecasts

Scientific Exhibits worthy of real study and helpful and time-saving Technical Exhibits

The Chicago Medical Society Annual Clinical Conference should be a MUST on the calendar of every physician. Plan now to attend and make your reservation at the Palmer House.

*Active relief*  
*in*  
*cough*  
both allergic and infectious

# HYDRYLLIN<sup>®</sup> COMPOUND

- allays bronchial spasm
- liquefies tenacious secretions
- suppresses allergic manifestations

The ingredients of Hydryllin Compound are proportioned to provide high therapeutic response.

Each 4 cc. (one teaspoonful) contains:

Aminophyllin . . . . .	32.0 mg.	Chloroform . . . . .	8.0 mg.
Diphenhydramine . . . . .	8.0 mg.	Sugar . . . . .	2.8 Gm.
Ammonium chloride . . . . .	30.0 mg.	Alcohol 5% (v/v)	

G. D. Searle & Co., Chicago 80, Illinois.

**SEARLE**

*Research in the Service of Medicine*

(Continued from Page 1490)

The Michigan Heart Association has released a brochure entitled "Publications and Teaching Aids for Physicians," which describes all the various professional materials available from the Michigan Heart Association that are useful to physicians. In most cases these booklets are free of charge. For a copy of the brochure, write Michigan Heart Association, 3919 John R. Street, Detroit 1.

\* \* \*

A return post card recently received by one of our doctors, reads on one side—"Dear Doctor: Don't throw away your surplus drugs or samples, I will buy them from you. I pay a fair, honest price. Please write or phone." A name and address are given, also a telephone number, and a note—"No toll charge." On the reverse side are three lines—"You may call on me." "My office hours are ———, except———" "Best time to call," and a place for address and signature. To the best of our knowledge, most of the samples left for doctors are marked, "Not to be sold." We understand that members of the pharmaceutical profession are much disturbed about this mail solicitation.

\* \* \*

As "Boss" Kettering defines research.—"Research is a high-hat word that scares a lot of people. It needn't.

It is rather simple. Essentially, it is nothing but a state of mind—a friendly welcoming attitude toward change. Going out to look for a change instead of waiting for it to come. Research, for practical men, is an effort to do things better and not to be caught asleep at the switch. The research state of mind can apply to anything; personal affairs or any kind of business, big or little. It is the problem solving mind as contrasted with the let-well-enough-alone mind. It is the composer mind instead of the fiddler mind. It is the 'tomorrow' mind instead of the 'yesterday' mind." (From—*You and Your Industry*, Scientific Apparatus Makers Association Bulletin, August, 1957).

#### M.D. LOCATIONS

Through October 1, 1957

Placed by Michigan  
Health Council

Gordon L. Doty, M.D.	East Tawas
Hai Soon Lee, M.D.	Niles

Assisted by Michigan  
Health Council

Edwin G. Meyer, M.D.	Alma
James D. O'Brien, M.D.	Grand Rapids
Lee B. Stevenson, M.D.	Detroit

**BUY THE BEST!  
BUY...**

Sealtest  
PASTEURIZED  
HOMOGENIZED  
MILK

Sealtest  
ICE CREAM  
VANILLA

TE 1-7000

**Sealtest**  
DAIRY PRODUCTS

# Thirst, too, seeks quality



## INDISPENSABLE FOR NEUROLOGICAL EXAMINATION



**Price**  
**\$9.00**

Chrome Plated  
No. 115-25

### Rabiner Neurological Hammer

Correct weight distribution permits pendular percussion for more precise control of the striking force in evaluating reflexes. With easily accessible pin and brush for sensory studies. American made.

Designed by  
**A. M. RABINER, M.D.**  
Brooklyn, N. Y.



### Wartenberg Pinwheel

For quick orientation as regard superficial algesia—in eliciting the abdominal, cremasteric and plantar reflexes. Particularly valuable when weak stimuli fail. American made.

Designed by  
**ROBERT WARTENBERG, M.D.**  
Medical School,  
University of California  
San Francisco



**Price**  
**\$8.60**

Chrome Plated  
No. 115-30

**NOBLE-BLACKMER, Inc.**

267 W. Michigan Ave., Jackson, Michigan

## Laboratory Examinations Tissue Diagnosis

Allergy Tests	Hematology
Autopsies	Papanicolaou Stain
Bacteriology	Pregnancy Tests
Basal Metabolism	Protein Bound Iodine
Chemistry	Urinalysis
Electrocardiograms	
Serology—Kahn and Wassermann	

### CENTRAL LABORATORY

Oliver W. Lohr, M.D., Director  
537 Millard Street  
Saginaw, Michigan  
PHONE: Pleasant 2-4100  
2-4109

In Lansing  
**HOTEL OLDS**  
Fireproof  
400 ROOMS

## THE DOCTOR'S LIBRARY

*Acknowledgments of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.*

**CLINICAL ELECTROCARDIOGRAPHY.** Part I. The Arrhythmias, with an Atlas of Electrocardiograms. By Louis N. Katz, A.B., M.A., M.D., F.A.C.P., Director, Cardiovascular Department, Michael Reese Hospital, Chicago, Illinois; Professional Lecturer in Physiology, University of Chicago, Chicago, Illinois, and Alfred Pick, M.D., Physician-In-Charge of Heart Station and Research Associate, Cardiovascular Department, Michael Reese Hospital, Chicago, Illinois. Illustrated With 415 Engravings. Philadelphia: Lea & Febiger, 1956. Price \$17.50.

This seven hundred page book is printed on a fine grade of paper and excellently bound. The opening pages contain a very thorough discussion of the anatomy and physiology of the heart. From here the reader is led logically and systematically to a discussion of the cardiac arrhythmias. The material covers the mechanism, treatment, and electrocardiographic diagnosis. Newer concepts of pathophysiology and treatment are extensively discussed. Every known type of arrhythmia is presented. Many electrocardiograms and illustrative cases make this an exceedingly valuable volume.

The bibliography and index are among the best this reviewer has ever seen.

This book should be in the library of every physician seriously interested in cardiology and electrocardiology.

L.P.S.

**PRINCIPLES OF CLINICAL ELECTROCARDIOGRAPHY.** By Mervin J. Goldman, M.D., Assistant Chief of the Medical Service, and Cardiologist, Oakland Veterans Administration Hospital, Oakland; Assistant Clinical Professor of Medicine, University of California School of Medicine, San Francisco. Los Altos, California: Lange Medical Publications. Price \$4.50.

This paper bound book has 306 pages and an adequate index. The basic principles of electrocardiography are briefly presented. Special attention is paid to the unipolar leads. The genesis of the complexes from the different portions of the heart is well explained both by

(Continued on Page 1496)



\$15.95 to \$32.50

**RIPPLE SOLE**

**REDUCES  
FOOT  
FATIGUE**

Write for illustrated brochure

**THE HACK  
SHOE COMPANY**

28 WEST ADAMS DETROIT 26 MICHIGAN

# ST. JOSEPH'S RETREAT



Member: American Hospital Association

Catholic Hospital Association

National Association of Private  
Mental Hospitals

The Central Neuro-Psychiatric  
Hospital Association

Under the direction of the  
Daughters of Charity of St. Vincent de Paul

Serving Metropolitan Detroit  
and Michigan almost a century

Martin H. Hoffmann, M.D.  
Medical Director

23200 West Michigan Avenue  
Dearborn  
Logan 1-1400

when anxiety and tension "erupts" in the G. I. tract...

**in spastic  
and irritable colon**



## PATHIBAMATE\*

Meprobamate with PATHILON® Lederle

Combines Meprobamate (400 mg.) the most widely prescribed tranquilizer... helps control the "emotional overlay" of spastic and irritable colon—without fear of barbiturate loginess, hangover or habituation... with PATHILON (25 mg.) the anticholinergic noted for its extremely low toxicity and high effectiveness in the treatment of many G.I. disorders.

Dosage: 1 tablet t.i.d. at mealtime. 2 tablets at bedtime.

Supplied: Bottles of 100, 1,000.



\*Trademark

● Registered Trademark for Tridihexethyl Iodide Lederle

LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK

# Plainwell Sanitarium

PLAINWELL, MICHIGAN

Member American Hospital Association

EDWIN M. WILLIAMSON, M.D.

Psychiatrist-in-Chief

Professional care for the nervous  
and mentally ill.

Telephone MUrray 5-8441



*Restful Six-acre Estate Overlooking the Kalamazoo River*

words and diagrams. The effect of heart position on the electrocardiogram is especially well done by diagrams. The atrial arrhythmias are adequately covered, the unitarian theory being followed. Arteriosclerotic heart disease in all its phases is satisfactorily explained, as are bundle branch block and the ventricular arrhythmias. The chapter on the effects of drugs and electrolytes on the cardiogram is sketchy.

In summary, this is a fine, concise book especially valuable to the beginner in electrocardiography and the medical student. The explanations are good; the diagrams, excellent. Those responsible for the latter have done an outstanding job. The book deserves a better binding.

L.S.

**MODERN PERINATAL CARE.** By Leslie V. Dill, M.D., F.A.C.S., Diplomate of the American Board of Obstetrics and Gynecology, Associate Clinical Professor, Obstetrics and Gynecology, Georgetown University School of Medicine; Consultant Obstetrics and Gynecology, Army Medical School and Walter Reed General Hospital; Staff Member, Obstetrics and Gynecology, Providence Hospital, Washington, D. C. New York: Appleton-Century-Crofts, Inc., 1957. Price \$6.50.

This is one of the most comprehensive, well-written books to date on modern perinatal care. The material is presented briefly and concisely and offers modern techniques for the total care of the woman from early in pregnancy through both the second and third stages and the postpartum period. It defines the physiological

limits for normal pregnancy, clarifies the present trends in prophylaxis and therapy for the normal pregnant woman and defines effective methods and therapies for treating the many pathological conditions which may occur during pregnancy and its complications. Much of the material is designed for those physicians who have had limited specialization training and offers to them acceptable treatment until consultation is available. There is an excellent chapter on Erythroblastosis; this very difficult subject is presented in a very simple but complete analysis of the subject. The last chapters include important data on the use of records, medicolegal information, and the religious problems encountered in any obstetric practice. The chapter titled "The Practice of Obstetrics and the Law" is especially well presented as it covers the many problems which present themselves to those physicians engaged in this type of practice.

This is an invaluable book for all physicians doing obstetrics, as well as those who are still in their training phase. J.R.P.

Achylia gastrica is common to both pernicious anemia and gastric carcinoma. \* \* \*

The term "cancer dyspepsia" is appropriate to use since it assists the physician to be cancer-minded in the presence of mild digestive symptoms. \* \* \*

Laboratory procedures are to set us thinking, but not to replace thought.

## The HAVEN SANITARIUM, Inc.

Rochester, Michigan

*In operation since 1932*

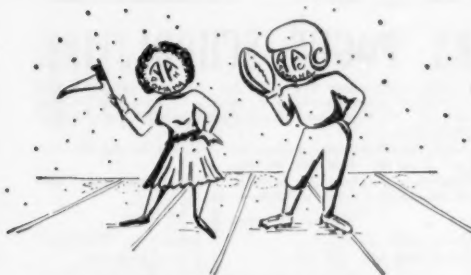
M. O. Wolfe, M.D.  
*Director of Psychotherapy*

Ralph S. Green, M.D.  
*Clinical Director*

Graham Shinnick  
*Manager*

A private psychiatric hospital for the intensive treatment  
of mental and emotional illnesses.

Telephone: OLive 1-9441



*Protection against loss of income from  
accident and sickness as well as hospital  
expense benefits for you and all your  
eligible dependents.*



### PHYSICIANS CASUALTY & HEALTH ASSOCIATIONS

OMAHA 31, NEBRASKA  
Since 1902

## SAMMOND PLEASANT LODGE

Offers to the elderly and chronically ill

Peace and quiet. Freedom of a large and richly  
furnished home and acres of lawns and wooded  
rolling grounds. scientifically prepared tasty  
meals. congenial companionship. A real

*"Home away from Home"*

Approved by the American Medical Association  
and Michigan State Department of Social Wel-  
fare—Highly recommended by members of the  
Medical Profession who have had patients at  
the Lodge.

For further information write to:

## SAMMOND PLEASANT LODGE

124 West Gates Street  
Romeo, Michigan

**EVERY WOMAN  
WHO SUFFERS  
IN THE  
MENOPAUSE  
DESERVES**

**"PREMARIN"**

*widely used  
natural, oral  
estrogen*

AYERST LABORATORIES  
New York, N. Y. • Montreal, Canada

5645



## MARY POGUE SCHOOL, Inc.

Founded 1903. Complete facilities for training retarded and epileptic children educationally and socially. Pupils per teacher strictly limited. Excellent educational, physical and occupational therapy programs.

Varied group activities under competent direction on our spacious grounds of 28 acres. Selected movies.

Separate buildings for boys and girls, each with 24-hour supervision of skilled personnel. Total enrollment 90.

*Catalog on request*

G. H. Marquardt, M.D.  
Medical Director

Barclay J. MacGregor  
Registrar

26 GENEVA ROAD, WHEATON, ILLINOIS  
(near Chicago)

### *Malpractice Prophylaxis*

FEWER SUITS, LOWER LOSSES

*Specialized Service  
makes our doctor safer*

THE  
MEDICAL PROTECTIVE COMPANY  
FORT WAYNE, INDIANA

Professional Protection Exclusively  
since 1899

#### DETROIT Office

George A. Triplett and Richard K. Wind  
Representatives

2405 West McNichols Road  
Telephone University 2-8064

## Classified Advertising

\$2.50 per insertion of fifty words or less, with an additional five cents per word in excess of fifty.

A VACANCY FOR MEDICAL RESIDENT will be open next February to a physician graduated from Class A medical school, interested in tuberculosis, possessing either temporary or permanent Michigan state license. Salary ranges between \$9,500 and \$12,000 per annum, varying with experiences and years of service here. An apartment, furnished with heat, electrical cooking range, electricity and refrigerator, at \$40.00 monthly rent, is available. Group insurance, social security, old age pension, sick leave and vacations are offered. Please apply to Medical Director, Oakland County Tuberculosis Sanatorium, Pontiac, Michigan.

FOR SALE: Fine property for rest or convalescent home in upper Michigan. Furnished and equipped. Four baths. Excellent condition. Can be bought at low price and on terms. For complete details, write: Tuttle Real Estate, Eagle River, Wisconsin.

## MERCYWOOD SANITARIUM

*Conducted by Sisters of Mercy*

Treatment for Mild Nervous and Mental Disorders

JACKSON ROAD

ANN ARBOR, MICHIGAN

NOrmandy 3-8571

**PM** says:

## "WHY TAKE CHANCES"

No practice is too small—no group too large  
to benefit from PM's management experience

WRITE OR CALL FOR INFORMATION

**PM**

• PROFESSIONAL  
• MANAGEMENT

Security Bank Building — Battle Creek  
SAGINAW — GRAND RAPIDS — DETROIT

A COMPLETE BUSINESS SERVICE FOR THE MEDICAL PROFESSION

Affiliated Offices in Other Cities

## Index to Advertisers

Abbott Laboratories.....	1374, 1375, 1467
American Meat Institute.....	1420-H
Ames Co., Inc.....	Cover III
Ayerst Laboratories.....	1356, Insert facing 1356, 1497
Baker Laboratories, Inc.....	1470
Barry Laboratories, Inc.....	1373
Bayer Company Division.....	1475
Brighton Hospital.....	1477
Burroughs Wellcome & Co.....	Insert facing 1364 1389, 1420-C
Cambridge Instrument Co.....	1482
Central Laboratory.....	1494
Chicago Medical Society.....	1491
Ciba.....	1469
Classified Advertising.....	1498
Coca-Cola.....	1493
Corn Products Refining Co.....	1485
Endo Laboratories.....	1471
Flint, Eaton & Co.....	1487
Geigy.....	1481
Hack Shoe Co.....	1494
Haven Sanitarium, Inc.....	1496
Hotel Olds.....	1494
Ingram, G. A., Co.....	1476, 1486
Keeley Institute.....	1499
Lakeside Laboratories.....	1342
Lederle Laboratories.....	1349, 1377, 1384, 1385, 1420-D, 1420-E, 1465, 1477, 1483, 1489, 1495
Lewal Pharmaceutical Co.....	1420-B
Lilly, Eli, & Co.....	1392
Mallard, Inc.....	1484
Marion Laboratories.....	1472
Mead Johnson & Co.....	1345
Medical Arts Supply Co.....	1480
Medical Protective Co.....	1498

Medical Supply Corporation of Detroit.....	1483
Merck Sharp & Dohme.....	1347, 1363, 1420-G
Mercywood Sanitarium.....	1498
Meyer & Co.....	1478
Michigan State Pharmaceutical Association.....	1420-F
Noble-Blackmer, Inc.....	1493
Parke, Davis & Co.....	Cover II, 1341, 1367
Pfizer Laboratories, Div. of Charles Pfizer & Co.....	1352, 1353
Physicians Casualty & Health Associations.....	1497
Picker X-Ray Corporation.....	1357
Plainwell Sanitarium.....	1496
Pogue School, Inc., Mary.....	1498
Professional Management.....	1499
Riker.....	1473
Robins, A. H., Co., Inc.....	1358, 1359, 1369, Insert facing 1380, 1391, 1488
Roerig.....	1360, 1361, 1379
St. Joseph's Retreat.....	1495
Sammond Pleasant Lodge.....	1497
Schering Corporation.....	1354, 1355, 1372, Insert facing 1372
Schmid, Julius, Inc.....	1464
Sealtest Dairy Products.....	1492
Searle, G. D., & Co.....	1463, 1491
Smith, Kline & French Laboratories.....	1420-A, Cover IV
Squibb.....	1466
Tutag, S. J., & Co.....	1490
U. S. Savings Bonds.....	1500
U. S. Vitamin Corporation.....	1386, 1387
Upjohn.....	1381
Vernor's Ginger Ale.....	1489
Wallace Laboratories.....	Insert facing 1468
Wine Advisory Board.....	1365
Winthrop Laboratories.....	Insert facing 1348, 1370, 1371, 1383, 1479, Insert facing 1484

THE  
**KEELEY**  
**INSTITUTE**  
DWIGHT, ILLINOIS

*Treating alcoholism and other problems of addiction.*

REGISTERED BY THE AMERICAN MEDICAL ASSOCIATION—  
MEMBER AMERICAN HOSPITAL ASSOCIATION.



## HER ENGINE FALTERED



A few minutes out of Dover, fog wrapped the flimsy Bleriot monoplane like a shroud.

The pretty young woman in the smart flying costume (she'd designed it herself—"bloomers, blouse, and hood of mauve satin") glanced at her compass. It was the first time she'd ever used one. She thought of instructor Hamel's parting words:

"Be sure to keep on course, Miss Quimby, for if you get five miles out of the way, you'll be over the North Sea, and you know what that means."

She climbed to 6,000 feet. Freezing cold and still fog.

She pointed her nose down. The comforting clatter of the Gnome engine changed to a coughing splutter. It was conking out! She leveled off, figuring how she'd ditch. To her relief, the engine suddenly took hold. Harriet re-checked her compass.

Some time later, breaking into clear sky, she

saw a stretch of beach below. She put down at Havelot; and on April 16, 1912, Harriet Quimby, first American woman to earn a pilot's license, became the first woman in the world to fly the English Channel.

As charming as she was brave, Harriet Quimby combined the thorough femininity and the self-confi-

dent ability which make American women like no others on earth. And help make this country so strong in character that investing in America is the wisest thing any American can do!

Today more than 40,000,000 of us have more than \$41,000,000,000 securely invested in our country—through U. S. Savings Bonds. Bonds in which *America* guarantees the safety of our savings and the return we receive. There's no greater security! Buy Bonds regularly—where you bank or through the Payroll Savings Plan where you work.

**Now Savings Bonds are better than ever!** Every Series E Bond purchased since February 1, 1957, pays 3½% interest when held to maturity. It earns higher interest in the early years than ever before, and matures in only 8 years and 11 months. Hold your *old* E Bonds, too. They earn more as they get older. And they're safe as America!

### PART OF EVERY AMERICAN'S SAVINGS BELONGS IN U.S. SAVINGS BONDS

The U.S. Government does not pay for this advertisement. It is donated by this publication in cooperation with the Advertising Council and the Magazine Publishers of America.



# safe...for your little patients, too

*"a definite relaxant effect"*<sup>1</sup>

With NOSTYN "...almost without exception the children responded by becoming more amenable, quieter and less restless."<sup>1</sup>

*without depression, drowsiness, motor incoordination*

"The most striking feature is that this drug does not act as a hypnotic..."<sup>1</sup> "No toxic side-effects were noted, with particular attention being paid to the hematopoietic system."<sup>2</sup>

**dosage:** *Children:* 150 mg. (½ tablet) three or four times daily. *Adults:* 150-300 mg. (½ to 1 tablet) three or four times daily.

**supplied:** 300 mg. scored tablets, bottles of 48 and 500.

(1) Asung, C. L.; Charcowa, A. I., and Villa, A. R.: Sea View Hosp. Bull. 16:80, 1956. (2) Asung, C. L.; Charcowa, A. I., and Villa, A. R.: New York J. Med. 57:1911 (June 1) 1957. (3) Report on Field Screening of Nostyn by 99 Physicians in 1,000 Patients, June, 1956.



AMES COMPANY, INC · ELKHART, INDIANA

41087



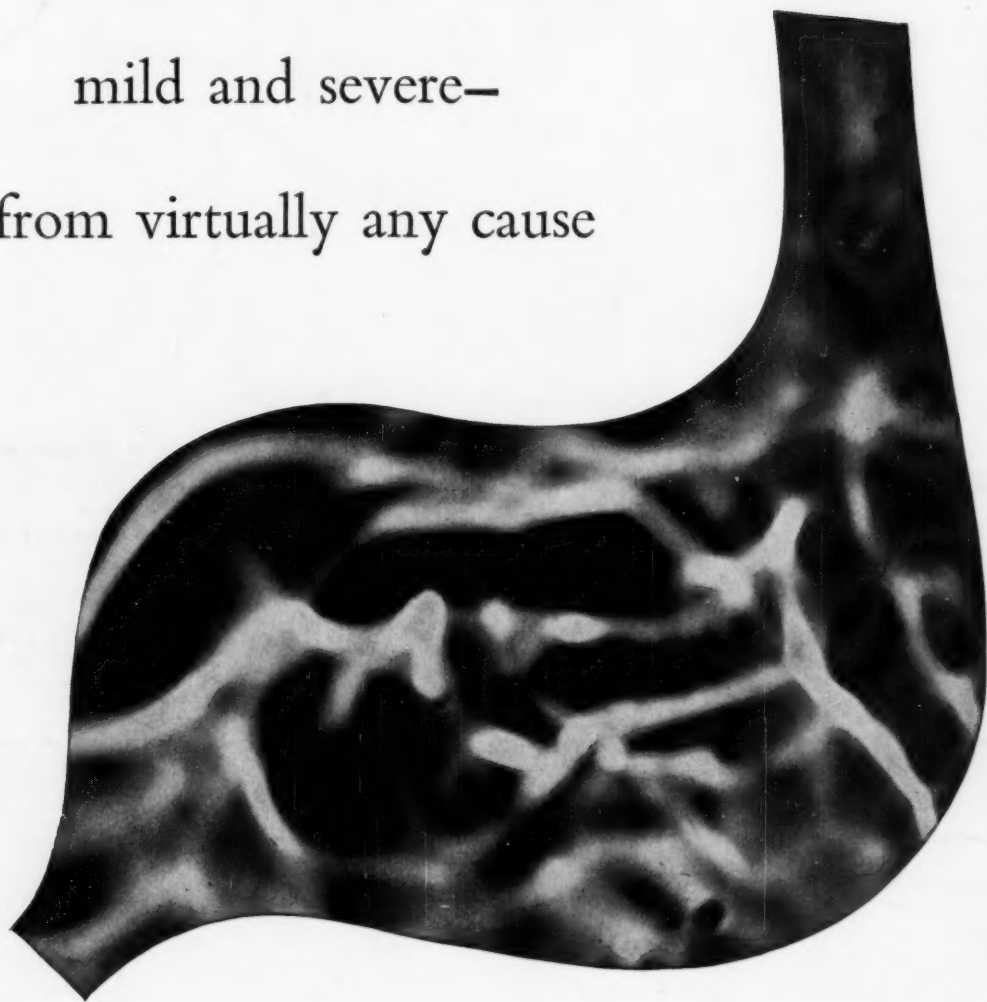
## calmative **nostyn**®

Ectylurea, AMES  
(2-ethyl-cis-crotonylurea)

"of value in the hyperactive as well  
as the emotionally unstable child"<sup>3</sup>



stops nausea and vomiting—  
mild and severe—  
from virtually any cause



# Compazine<sup>★</sup>

tablets, ampuls, Spansule<sup>†</sup> capsules

*Smith, Kline & French Laboratories, Philadelphia*

★T.M. Reg. U.S. Pat. Off. for prochlorperazine, S.K.F.

†T.M. Reg. U.S. Pat. Off. for sustained release capsules, S.K.F.